

## **United States Steel Corporation Midwest Plant**

6300 US Hwy 12 Portage, Indiana 46368

## Storm Water Pollution Prevention Plan (SWPPP)

**Revision Date: 04 October 2018** 

[Pursuant to NPDES Permit IN0000281, Effective April 1, 2016]

#### **TABLE OF CONTENTS**

#### **PREFACE**

Review/Revision Log

Non-Storm Water Assessment and Management Certification

<u>Section</u>	<u>n</u>	<u>Page</u>
1.0	Introduction [Part I.E.1.]	1
2.0	Storm Water Pollution Prevention Team [Part I.E.2.(a)]	1
3.0	Site Description - Facility Activities [Part I.E.2.(b)(1)]	1
4.0	Location Map [Part I.E.2.(b)(2)]	2
5.0	Site Maps [Part I.E.2.(b)(3)]	2
6.0	Potential Pollutant Sources and Activities [Part I.E.2.(c)(1)&(2)]	5
7.0	Spills and Leaks [Part I.E.2.(c)(3)]	5
8.0	Non-Storm Water Discharge [Part I.E.2.(c)(4)]	6
9.0	Salt Storage [Part I.E.2.(c)(5)]	6
10.0	Sampling Data [Part I.E.2.(c)(6)]	6
11.0	Control Measures to Meet TBELs [Part I.E.2.(c)(7)]	7
11.1	Structural Controls	7
11.1.2	Storm Water Treatment Facilities	7
11.2	Non-Structural Controls and Practices	7
11.2.1	Non-Structural Controls and Practices Commonly Used	8
11.2.2	Non-Structural Control Practices in Accordance with Other Regulatory Programs	8
12.0	Housekeeping and Maintenance [Part I.E.2.(d)(1)&(2)]	9
13.0	Spill Prevention and Response Procedures [Part I.E.2.(d)(3)]	9
14.0	Erosion and Sediment Control [Part I.E.2.(d)(4)]	10
15.0	Training [Part I.E.2.(d)(5)]	10
16.0	Inspections [Part I.E.2.(e)]	10
17.0	Monitoring [Part I.E.2.(f)]	11
18.0	SWPPP General Requirements [Part I.E.2.(g)]	12

#### **APPENDICES**

Appendix A Maps and Diagrams: SWPPP Site Maps, Line Discharge Diagrams (LDDs),

Plant Storm Water Flow Diagrams

Appendix B-1 SPCC Plan Oil Storage Container Inventories (Potential SW Pollution Sources)

Appendix B-2 SW Potential Pollution Source Inventories, Assessment and Controls

Appendix C SWPPP Team Members / Emergency Contacts and Notifications

Appendix D Pesticides, Herbicides & Fertilizer Application

Appendix E Inspection Checklists

Appendix F Annual Reports

Appendix G Storm Water Discharge Data Summaries

Appendix H Environmentally Sensitive Areas

## **Preface**

#### **Non-Storm Water Assessment and Management Certification**

All storm and non-storm water discharges are regulated under the facility's NPDES permit. These discharges are regularly monitored under the requirement of the NPDES permit. NPDES sampling is required on a daily, weekly and monthly basis for process water system outfalls and on a daily, weekly and quarterly basis for non-contact cooling water and storm water combined system outfalls. There are no storm water only discharge points at this facility. The quarterly permit-required sampling events are sufficient to satisfy the non-storm water contribution assessment. These discharges are evaluated for: TSS, COD, Oil and Grease, Ammonia, Zinc and pH as indicated in Section 1.0 of this plan.

Detergent or solvent-based washing of equipment or vehicles that would allow wash water additives to enter any storm water sewer not appropriately permitted under the facility NPDES permit is strictly prohibited.

All interior maintenance area floor drains with the potential for maintenance fluids or other materials to enter storm water sewers are sealed or diverted to treatment facilities permitted under the facility's NPDES permit.

I certify storm water discharges entering waters of the state have been evaluated for the presence of illicit discharges and non-storm water contributions.

Alexis Piscitelli

Director, Environmental Control U.S. Steel Great Lakes Works U.S. Steel Midwest Plant

Date: <u>04 October 2018</u>

#### **Review and Revision Log**

Date of Review/Revision	Description of Review/Revision	Responsibility		
01/21/2011	Formalization of current storm water pollution prevention activities into plan. Activities have been ongoing since 2001. No procedural changes to activities with this revision.	Water Compliance Mgr OCS Environmental		
06/10/2011	Update Appendix B Source Inventory with additional sources; update SW Team list Appendix C to include contractor conducting SW inspections and plan maintenance.	Water Compliance Mgr OCS Environmental		
03/01/2012	Update of all plan provisions based on new NPDES permit requirements effective 03/01/2011.	Water Compliance Mgr MW Compliance Mgr ST Environmental		
06/21/2012	General text updates and revisions based on review; updates to App B, App C, App D, App E	Water Compliance Mgr MW Compliance Mgr ST Environmental		
02/21/2013	Evaluate outfall foam risk and practices; update App B source tables; add new EMP to page 8 of text; update APP E; binder covers added denotation of hardcopy locations	Water Compliance Mgr MW Compliance Mgr ST Environmental		
01/31/2014	Replace inventory and maps in App A & B; insert pest, herb, fert list in App D	Water Compliance Mgr MW Compliance Mgr ST Environmental		
08/10/2015	Removal of Outfall 001 language	Water Compliance Mgr MW Compliance Mgr ST Environmental		
03/31/2017	Updates based on new NPDES renewal permit	Water Compliance Mgr MW Compliance Mgr ST Environmental		
10/04/2018	Separated SWPPP from SPCC Plan; updated management changes, names, plan text updates, etc.	Water Compliance Mgr MW Compliance Mgr ST Environmental		

### **SWPPP**

[STORM WATER POLLUTION PREVENTION PLAN]

#### 1.0 Introduction [Part I.E.1.]

This Storm Water Pollution Prevention Plan (SWPPP) was prepared in accordance with the United States Steel (USS) – Midwest Plant's (Midwest's) water discharge permit issued by the Indiana Department of Environmental Management (IDEM). This plan is written to ensure compliance with National Pollutant Discharge Elimination System (NPDES) Permit Number IN0000337 as indicated by citations referenced in the heading of each section. The purpose of this SWPPP is to identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity at the facility, describe practices to be used in reducing the potential for pollutants to be exposed to storm water, and to assure compliance with the terms and conditions of the NPDES permit. The SWPPP was designed to complement and work in conjunction with existing documents, internal programs, policies and procedures such as the Spill Prevention Control and Countermeasure (SPCC) Plan and Standard Operating Procedures.

#### 2.0 Storm Water Pollution Prevention Team [Part I.E.2.(a)]

The SWPPP is administered by the Environmental Control Department. The Certified Operator and the Environmental Compliance Manager for the Midwest Plant have the main responsibility for implementation of the plan. They are responsible for providing structure and direction to the storm water management program. The Administrator is also responsible for the development of the plan and ensuring that the plan is regularly updated with assistance from the SWPPP team members. The various team members are responsible for development, implementation resources and ensuring that regular updates are completed when changes at the facility warrant revisions. The team members, contacts, and roles are listed in Appendix C of this plan.

#### 3.0 Site Description - Facility Activities [Part I.E.2.(b)(1)]

Midwest is a steel finishing facility that receives raw steel coils to produce tin plated and chrome plated steel, galvanized steel, or cold rolled products. It is located in Portage, Indiana in northern Porter County. Surrounding land use is industrial/commercial and railroad right-ofway. The site is a relatively flat area and has been extensively modified for industrial activity.

Lake Michigan runs adjacent along the facility's northern property boundary and Burns Waterway runs adjacent along the facility's western property boundary. Industrial/commercial property runs adjacent to the facility's eastern property boundary and rail right-of-way runs adjacent to the facility's southern property boundary. Various activities and sources that can impact storm water throughout the facility have been surveyed and are detailed in the inventory tables in Appendix B-1 and B-2.

#### 4.0 Location Map [Part I.E.2.(b)(2)]

The general site location map from the U.S. Geological Survey (USGS) is provided in Appendix A.

#### 5.0 Site Maps [Part I.E.2.(b)(3)]

Midwest has several mapping systems available that provide information on storm water systems, potential pollution sources, tank locations and other important information. Document control practices encourage the use of referencing site maps as needed to avoid duplication and use of maps in other plans which may not contain the latest revision. Site maps which meet the requirements of several plans may be referenced as a source to avoid document control errors such as maps included in the SPCC Plan and the Engineering Department plant system maps.

The site maps are provided in Appendix A with corresponding Pollution Source Inventories in Appendix B-1 and B-2, unless otherwise noted below. They provide the following information, where applicable:

- (A) Boundaries of the property and the size of the property in acres;
- (B) Location and extent of significant structures and impervious surfaces;
- (C) Directions of storm water flow;
- (D) Locations of all storm water control measures;
- (E) Locations of all receiving waters, including wetlands, in the immediate vicinity of the facility including waterbodies listed as impaired and identified by the State of Indiana or EPA as Tier 2 or Tier 2.5 waters.
- (F) Locations of all storm water conveyances including ditches, pipes, and swales;

- (G) Locations of potential pollutant sources;
- (H) Locations where significant spills or leaks have occurred;
- (I) Locations of all storm water monitoring points;
- (J) Locations of storm water inlets and outfalls, and an approximate outline of the areas draining to each outfall;
- (K) Municipal separate storm sewer systems and where your storm water discharges to them;
- (L) Areas of federally-listed critical habitat for endangered or threatened species are provided in Appendix H.
- (M) Locations of the following activities where such activities are exposed to precipitation:
  - i. fueling stations;
  - ii. vehicle and equipment maintenance and/or cleaning areas;
  - iii. loading/unloading areas;
  - iv. locations used for the treatment, storage, or disposal of wastes;
  - v. liquid storage tanks;
  - vi. processing and storage areas;
  - vii. immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or byproducts used or created by the facility;
  - viii. transfer areas for substances in bulk; and
  - ix. machinery.
- (N) Locations and sources of run-on to your site from adjacent property that contains significant quantities of pollutants.
- (O) Identify in the SWPPP where any of the following activities may be exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and zinc dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., filter presses); and storage areas of raw material such as scrap or metal in any form.

(P) An inventory of materials handled at the site that may potentially be exposed to precipitation or runoff and areas where significant deposition of particulate matter from process air emissions or material-handling activities are possible.

Only the larger areas of historic contamination are included on the site maps. Historic solid waste management units (SWMUs) and underground storage tanks (USTs) were all identified and addressed under RCRA Corrective Action programs. These sites either received no further action designation from IDEM or continue to be monitored as required under RCRA where appropriate.

Topographical mapping was not provided because the terrain is relatively flat with steep drop off elevations present at the shoreline along Burns Waterway and Lake Michigan, therefore, these maps would have limited purpose. The landfill area Greenbelt II has self-contained storm water collection systems that discharge into the waste water treatment system.

The Line Discharge Drawings (LDDs) provide an overview of all of the various discharges throughout the facility and is located in Appendix A. These drawings include point source drainage and areas of storm water runoff.

Appendix D provides a listing of various sites where pesticides, herbicides or fertilizers are applied in lieu of providing map locations. The table provided lists the general areas of use for pesticides, herbicides and fertilizers at the facility. The most recent data regarding quantities of application is available from the landscaping consultant. Each of the items listed is applied via manual application and is applied seasonally, as needed (the quantity applied varies). Herbicides may also be applied by plant personnel in very small areas within the plant as needed with a hand-held sprayer (consumer-scale application only).

#### 6.0 Potential Pollutant Sources and Activities [Part I.E.2.(c)(1)&(2)]

Tables provided in Appendix B-1 and B-2 detail sources of potential storm water pollution as well as the location of each and includes the pollutant material types, typical quantities, methods of storage and remedial actions to reduce exposure, if any. Appendix B-1 provides listings for oil and fuel storage containers in accordance with SPCC Plan requirements. Appendix B-2 provides listings for all other potential storm water pollution sources. These tables are provided in lieu of narrative descriptions which would not provide enough detail to sufficiently describe all aspects of pollution sources and controls in place.

There are no outdoor manufacturing processes exposed to storm water as all manufacturing activities are located indoors. There are some outdoor areas where mobile equipment and vehicular activities occur (roads, parking lots, etc) and areas where loading and unloading of liquid materials occur that may have the potential to impact storm sewers. The landfill and oily waste pad areas are the only outdoor processing areas at the facility where industrial wastes are handled and disposed. These areas are covered under the facility's waste management permit (RCRA Part B) and has storm water runoff and containment systems that collect water for processing through their NPDES permitted waste water treatment system. There are no significant sources of fugitive dust emissions.

#### 7.0 Spills and Leaks [Part I.E.2.(c)(3)]

Spill history was considered during planning, development and identification of pollution sources. Potential spills and leaks can occur anywhere throughout the facility. The potential pollution source inventories in Appendix B-1 and B-2 includes sources where potential spills may occur. Appendix B-1 lists all oil and fuel storage tanks and containers under the SPCC Plan provisions, and evaluates their potential impacts. The following table summarizes the reportable incidents that have occurred within the last three years.

Date	Incident	Description	Attributable to Stormwater	
October 2017	Exceedance of Daily Max Total	Chrome Treatment lamella	No	
October 2017	Chromium at Outfall 304	clarifier issues		
April 2017	Discoloration Outfall 004	Chrome Process wastewater	No	
April 2017		leaked to final treatment		
January 2017	Exceedance of Daily Max	Possible Lab disposal	No	
January 2017	Hexavalent Chromium at Outfall 304	practices		
April 2016	Discoloration of Outfall 004	Oil leaking through heat	No	
April 2016	Discoloration of Outrail 004	exchanger to NCCW	INO	
Santambar 2016	K062 release	Broken HCL piping and	No	
September 2016	NUOZ TEIEdSE	overflow of acid trench		

All incidents have been communicated to plant personnel. There are effective spill prevention programs in place throughout the facility. Because none of the incidents listed above were directly attributable to storm water, their locations are not identified on the site map.

#### 8.0 Non-Storm Water Discharge [Part I.E.2.(c)(4)]

All storm and non-storm water discharges are comingled and regulated under the facility's NPDES permit. These discharges are regularly monitored under the requirement of the NPDES permit. NPDES sampling is required at mandated frequencies for process water, non-contact cooling water and storm water. There are no storm water only discharge points at this facility and the quarterly permit-required sampling events are sufficient to satisfy the non-storm water contribution assessment. Storm water (comingled) discharge monitoring is summarized in Section 17.0 of this plan.

#### 9.0 Salt Storage [Part I.E.2.(c)(5)]

Salt for de-icing the roads is brought on-site during the winter months and is stored indoors at the Refractory Shed (Salt Shed). The stored salt piles are not exposed to storm water.

#### **10.0** Sampling Data [Part I.E.2.(c)(6)]

Storm water discharge monitoring data is summarized in Appendix G which includes data collected during the previous NPDES permit term (March 1, 2011 – February 28, 2016). Current storm water monitoring data and baseline comparisons are retained electronically.

#### 11.0 Control Measures to Meet TBELs [Part I.E.2.(c)(7)]

The facility is operated and maintained to minimize the exposure of storm water to potential sources of significant pollutant materials. This section provides descriptions of storm water pollution prevention controls and practices appropriate for Midwest. These controls are assigned to each potential pollution source provided in the inventories located in Appendix B-2. Non-structural control practices such as housekeeping, inspections, maintenance practices and training are also discussed in this section.

#### 11.1 Structural Controls

Midwest employs several structural control options. The comprehensive tables in Appendix B-2 provide listings of structural and non-structural controls utilized for each potential pollution source where applicable. Listed below are some of the commonly used structural controls used at the facility.

#### Commonly Used Structural Controls:

- Plugged drain(s) in secondary containment dike(s) to prevent drainage of contaminated storm water
- Secondary containment such dikes, pallets, berms, double walls, etc.
- Berms or diversionary walls/structures or swales
- Bank erosion control systems (rip-rap, sheet piling or other structures)
- Vegetation along banks and in open areas to prevent erosion and wash out
- Modified equipment such as valves, piping, flanges, etc. to prevent releases
- Raised, sealed or plugged storm sewer manhole(s)/inlet(s)/pipe(s) to prevent contaminated storm water from entering the storm sewer

#### 11.1.2 Storm Water Treatment Facilities

The facility has waste water treatment facilities that treat some storm water which is comingled with process water and ultimately discharged through Outfall 004.

#### 11.2 Non-Structural Controls and Practices

Midwest employs several non-structural control options and practices. The comprehensive tables in Appendix B-1 and B-2 provide listings of structural and non-structural controls utilized

for each potential pollution source where applicable. Listed below are some of the commonly used non-structural controls used at the facility.

#### 11.2.1 Non-Structural Controls and Practices Commonly Used

#### Commonly Used Non-Structural Controls and Practices:

- Follow procedures for loading and unloading operations
- Follow procedures for drum and mobile container(s) storage and handling operations
- Storage of oily and contaminated equipment and spare parts indoors and dispose of obsolete parts and equipment, where possible
- Truck and equipment washing operations only in designated areas
- Practice inventory controls for materials that are potential storm water pollutant sources
- Maintain a spill kits in the areas of concern
- Control traffic through the area to minimize tracking, deposition and runoff
- Regular inspections of oil storage tank systems in accordance with SPCC Plan
- Maintain drainage system culverts and piping to prevent flooding, specifically in areas that drain into storm water treatment systems
- Quarterly SWPPP inspections of designated SW pollution sources
- Regular maintenance outages and inspections
- Housekeeping practices

#### 11.2.2 Non-Structural Control Practices in Accordance with Other Regulatory Programs

All new installations of tanks and/or containers storing oils or hazardous substances are required to meet secondary containment requirements in accordance with 327 IAC 2-10 and 40 CFR 112 in accordance as follows:

- 327 IAC 2-10 applies to any aboveground tanks storing liquid hazardous materials exceeding a capacity of 660 gallons constructed on or after May 28, 1999; and,
- 40 CFR 112 applies to facilities with an aggregate aboveground oil storage capacity of 1,320 gallons or greater.

Daily assessments of the effluent discharge systems are conducted by waste water treatment operators. The facility also conducts mandated monitoring, sampling and analysis in accordance with their NPDES permit. Hazardous waste storage areas are inspected daily or

weekly in accordance with RCRA Subtitle C requirements. PCB transformers are inspected quarterly in accordance with 40 CFR 761.

#### 12.0 Housekeeping and Maintenance [Part I.E.2.(d)(1)&(2)]

Each operating and maintenance area is responsible for housekeeping in strict accordance with safety and environmental requirements. Special and industrial waste receptacles are regularly managed by waste vendors for pickups and offsite disposal. Hazardous wastes are also managed by a waste vendor who conducts regular inspections and facilitates regularly scheduled pickup and offsite disposal activities. Under RCRA, hazardous wastes are not stored onsite for longer than 90 days unless it specifically meets exemptions under satellite container provisions. The onsite waste landfill is managed by the Environmental Control Department under a state issued waste management permit.

In order to minimize the storm water exposure to potential pollutant materials, various maintenance activities take place throughout Midwest, which include regular inspection and maintenance of operating equipment as well as mobile equipment. Each operating and maintenance department is responsible for their own respective areas. Secondary containment structures are emptied manually and taken to one of many on site waste water treatment facilities. No secondary containment systems are allowed to be drained into storm water systems and most containment structures which have risk associated with pollution sources have permanently plugged drains.

#### 13.0 Spill Prevention and Response Procedures [Part I.E.2.(d)(3)]

Oil spill prevention is outlined in the SPCC Plan. Spill prevention of other hazardous materials is obtained through physical control structures and numerous internal operating and maintenance procedures. All spills and incidents are reported internally and tracked through the electronic reporting system. The facility also has hazardous materials and emergency response equipment with trained personnel to expedite any type of emergency response or containment events.

The facility has a Spill Prevention Control and Countermeasure (SPCC) Plan which details spill prevention policies and procedures, and response actions for all oil storage facilities.

For document control purposes, refer to the electronic document management systems for the most recent versions of procedures and checklists.

#### 14.0 Erosion and Sediment Control [Part I.E.2.(d)(4)]

The west side of the plant has had some historic erosion along Burns Waterway with washouts occurring during extreme rainfall events (well over five inches of rainfall during a short period of time) which have occurred a few times since 2001. These events are isolated and there are no erosion problems commensurate with normal rainfall events. These historic washout events did not cause impedance of the waterway.

#### 15.0 Training [Part I.E.2.(d)(5)]

Environmental and awareness training is provided to employees on a variety of subjects which include topics relating to storm water pollution and prevention. A specific environmental bulletin on storm water pollution prevention training is also employed and is part of the existing overall training program. Training addresses the various topics such as spill response and prevention, good housekeeping, and material management practices.

#### 16.0 Inspections [Part I.E.2.(e)]

The following inspections are conducted as part of the water pollution prevention measures at the facility.

Routine Facility Inspections					
Frequency Inspection		Description	Responsibility		
Quarterly	SWPPP	Visual inspection of certain identified	USS Env Compliance Mgr		
inspections		pollution source risk areas, see checklist	ST Environmental,		
		Appendix E. Each year, one of these	contractor		
		inspections are completed during a rain			
		event.			

Routine Facility Inspections				
Frequency Inspection		Description	Responsibility	
Quarterly	Visual assessment of storm water discharges	Visual assessment of discharges to indicate obvious signs of storm water pollution, e.g. color, odor, floating solids, foam, etc.	USS Env Compliance Mgr ALS, contractor	
Quarterly	PCB inspections (TSCA)	Visual inspection of all PCB transformers and storage area for evidence of leaks or pending leaks.	USS Env Compliance Mgr USS MS&U Energy Mgr	
Semiannually	SPCC inspections (OPA)	Visual inspection of all oil storage tanks and containers for evidence of leaks or pending leaks, see listings in Appendix B-1.	USS Env Compliance Mgr USS MS&U APEX Mgr	
Annual	SW Review and Report	Review implementation of control measures including review of routine facility inspection documents; any applicable corrective action status; baseline monitoring results; and compliance status.	USS Env Compliance Mgr Water Compliance Contractors USS Div Mgrs	

The corrective action system may be used to ensure that follow up activities are completed to resolve inspection findings. Completed inspections are retained electronically. Annual storm water report copies are provided in Appendix F.

#### 17.0 Monitoring [Part I.E.2.(f)]

Midwest is permitted to discharge storm water, noncontact cooling water and treated process waters into Burns Waterway. Storm water sampling and analyses are done by a third-party contractor. Contract personnel are responsible for ensuring samples are collected per the required method and at the required frequency. They are also responsible for conducting insitu analyses for parameters that require immediate analyses (pH, total residual chlorine, etc) per the USEPA waste water analysis guidelines and standard methods. Their offsite laboratory is responsible for conducting analyses on the remaining parameters in strict accordance USEPA standard methods. Laboratory contract personnel prepares the monthly discharge monitoring reports (DMRs) for review and certification by USS management. USS management are responsible for reviewing analysis data, corrective action (when needed), certifying DMRs, and ensuring reports are submitted in accordance with regulatory requirements.

Most of the outfalls are combined water types (process water, noncontact cooling water, storm water, etc) and there are no "storm water only" outfalls or runoff monitoring points. The following table lists each outfall that is permitted to discharge storm water.

NPDES PERMITTED STORM WATER DISCHARGE MONITORING POINTS						
		NPDES Limit - Loading (lb/day)		NPDES Limit - Concentration (mg/L)		Sampling
Outfall	Parameter	Monthly Avg	Daily Max	Monthly Avg	Daily Max	Frequency
	011.0					4 347 11
OUTFALL 002	Oil & Grease				report	1x Weekly
	Total Residual Chlorine	0.04	0.09	0.01	0.02	Daily
	TSS				report	Quarterly
	COD				report	Quarterly
	Ammonia				report	Quarterly
	Zinc				report	Quarterly
	рН			Range 6.0	- 9.0 s.u.	1x Weekly
OUTFALL 003	Oil & Grease				report	1x Weekly
	Total Residual Chlorine	1.14	2.27	0.01	0.02	Daily
	TSS				report	Quarterly
	COD				report	Quarterly
	Ammonia				report	Quarterly
	Zinc				report	Quarterly
	pH			Range 6.0	- 9.0 s.u.	1x Weekly
						·
<b>OUTFALL 004</b>	Oil & Grease				report	1x Weekly
	Total Residual Chlorine	1.3	3.1	0.01	0.02	Daily
	Silver	0.012	0.021	0.043	0.13	2x Monthly
	Free Cyanide	1.2	2.1	0.0075	0.013	2x Monthly
	Cadmium	1.2	2.1	0.0044	0.013	2x Monthly
	Copper	4.7	8.2	0.030	0.052	2x Monthly
	Nickel (interim)	Report	Report	Report	Report	2x Monthly
	Nickel (final)	33.3	57.1	0.21	0.36	2x Monthly
	Lead (interim)	Report	Report	Report	Report	2x Monthly
	Lead (final)	6.0	10.5	0.038	0.066	2x Monthly
	Mercury	Report	Report	Report	Report	6x Yearly
	Whole Effluent Toxicity	See permit	See permit	See permit	See permit	Quarterly
	pH			Range 6.0		5x Weekly
	L bii	l		nange 0.0	J.0 J.u.	JA WCCKIY

#### 18.0 SWPPP General Requirements [Part I.E.2.(g)]

This plan is retained onsite and is available for review in the Environmental Compliance Manager's office. The SWPPP is amended whenever there is a change in design, construction, operation or maintenance at the facility that significantly changes the nature of pollutants discharged in storm water from your facility, or significantly increases the quantity of pollutants discharge, or upon written notice by the State that the SWPPP proves to be ineffective in

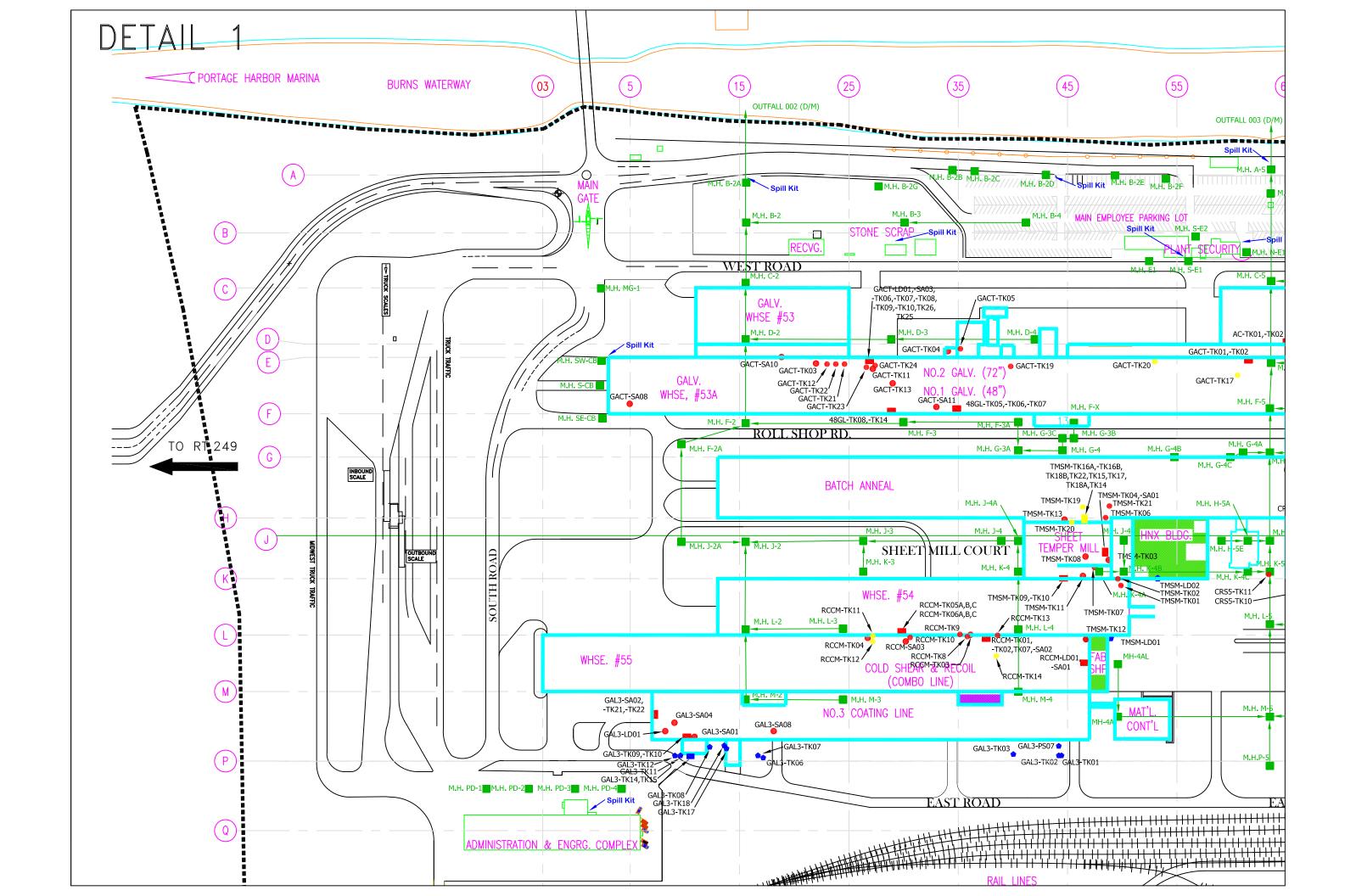
achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Further, this SWPPP must be reviewed to determine if and where revisions may need to be made if the following conditions occur:

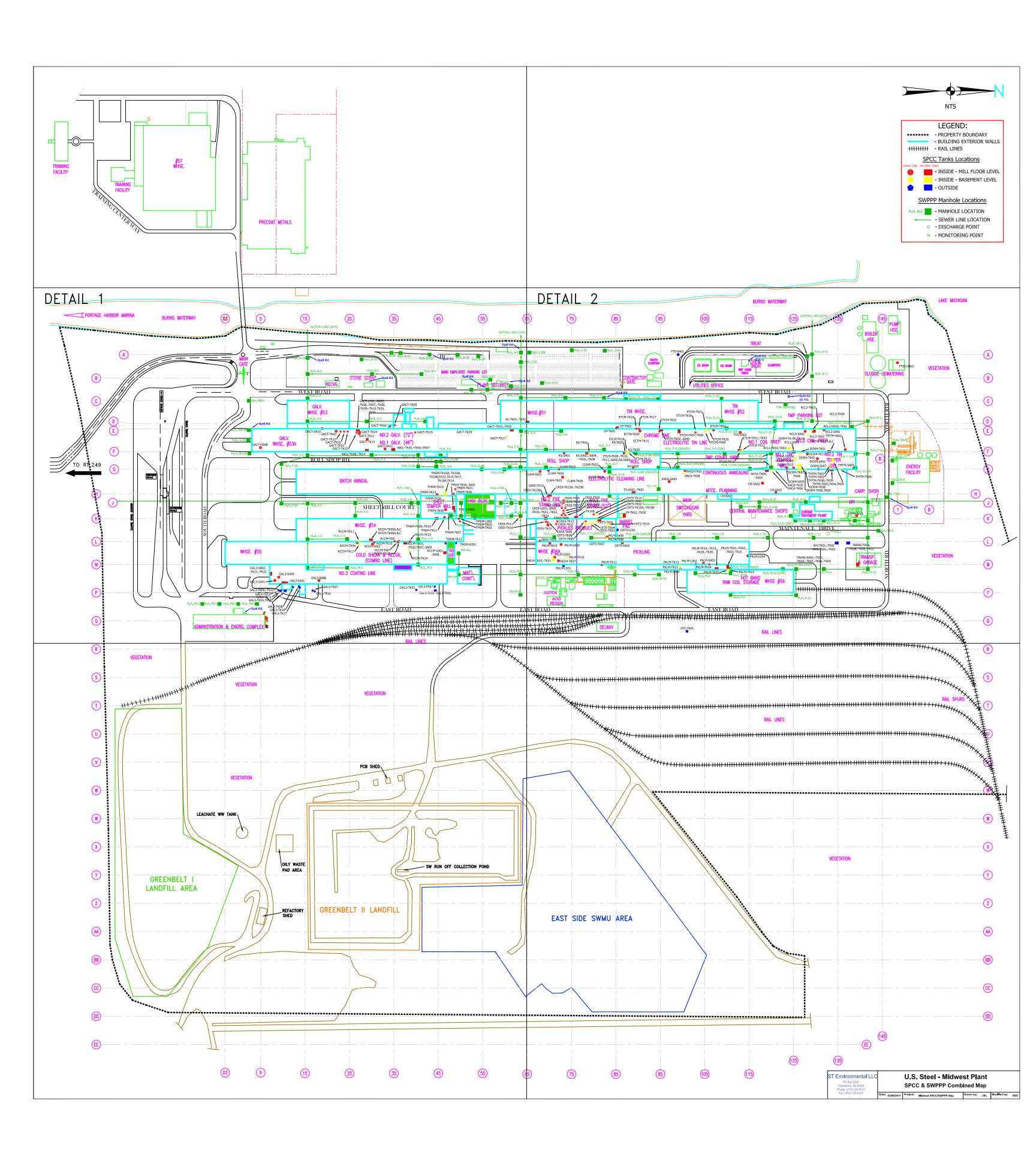
- a. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this NPDES permit) occurs at your facility;
- b. Your control measures are not stringent enough for the discharge to meet applicable water quality standards;
- c. A required control measure was never installed, was installed incorrectly, or is not being properly operated or maintained;
- d. Visual assessments indicate obvious signs of storm water pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam); or
- e. The average of two semi-annual sampling results exceeds a baseline.

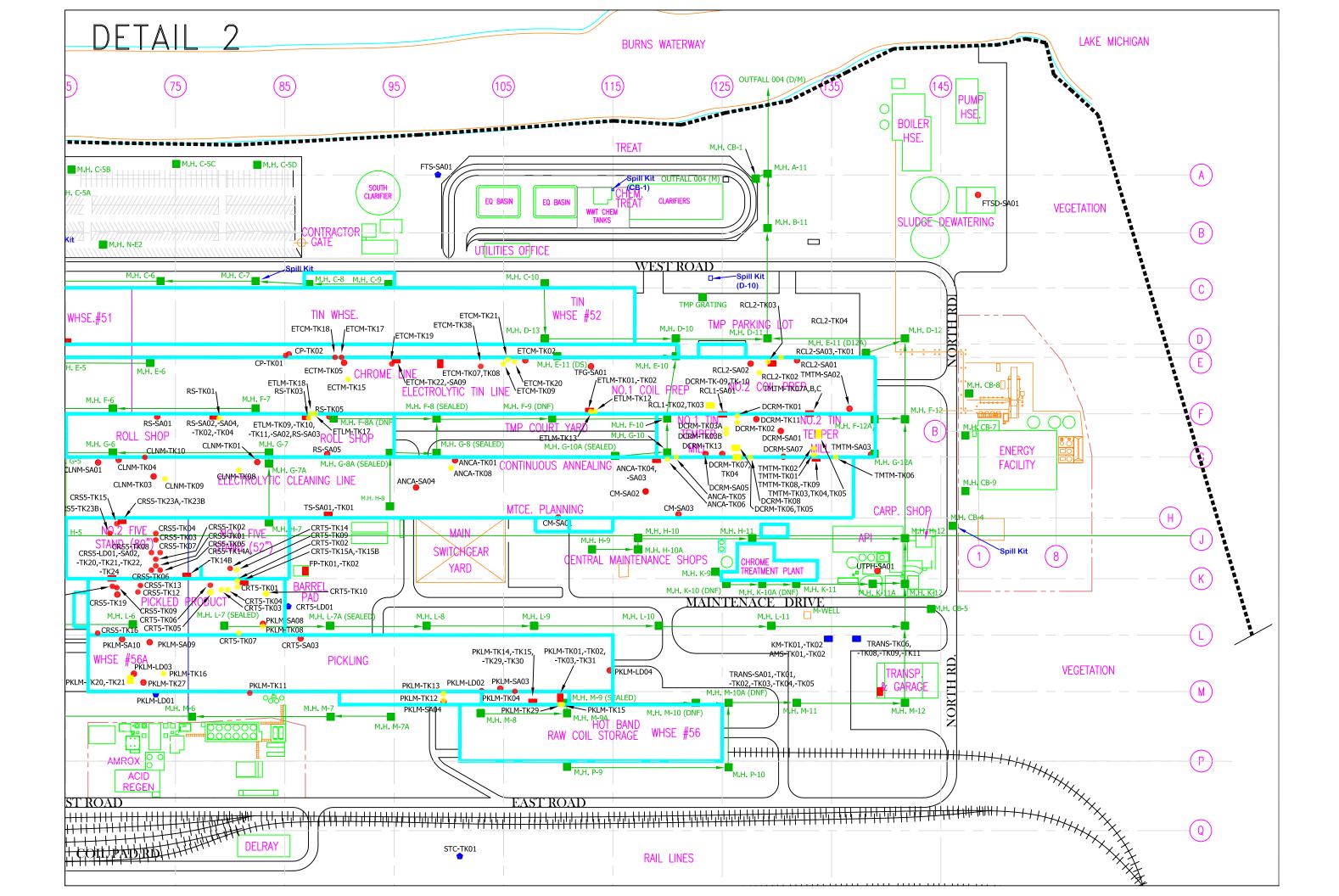
This plan was designed such that updates to the content to any of the appendices would not require a revision to the plan text or re-certification. It is designed to be a working document with regular updates which are documented in the Revision Log located in the Preface of this plan.

# APPENDIX A MAPS & DIAGRAMS

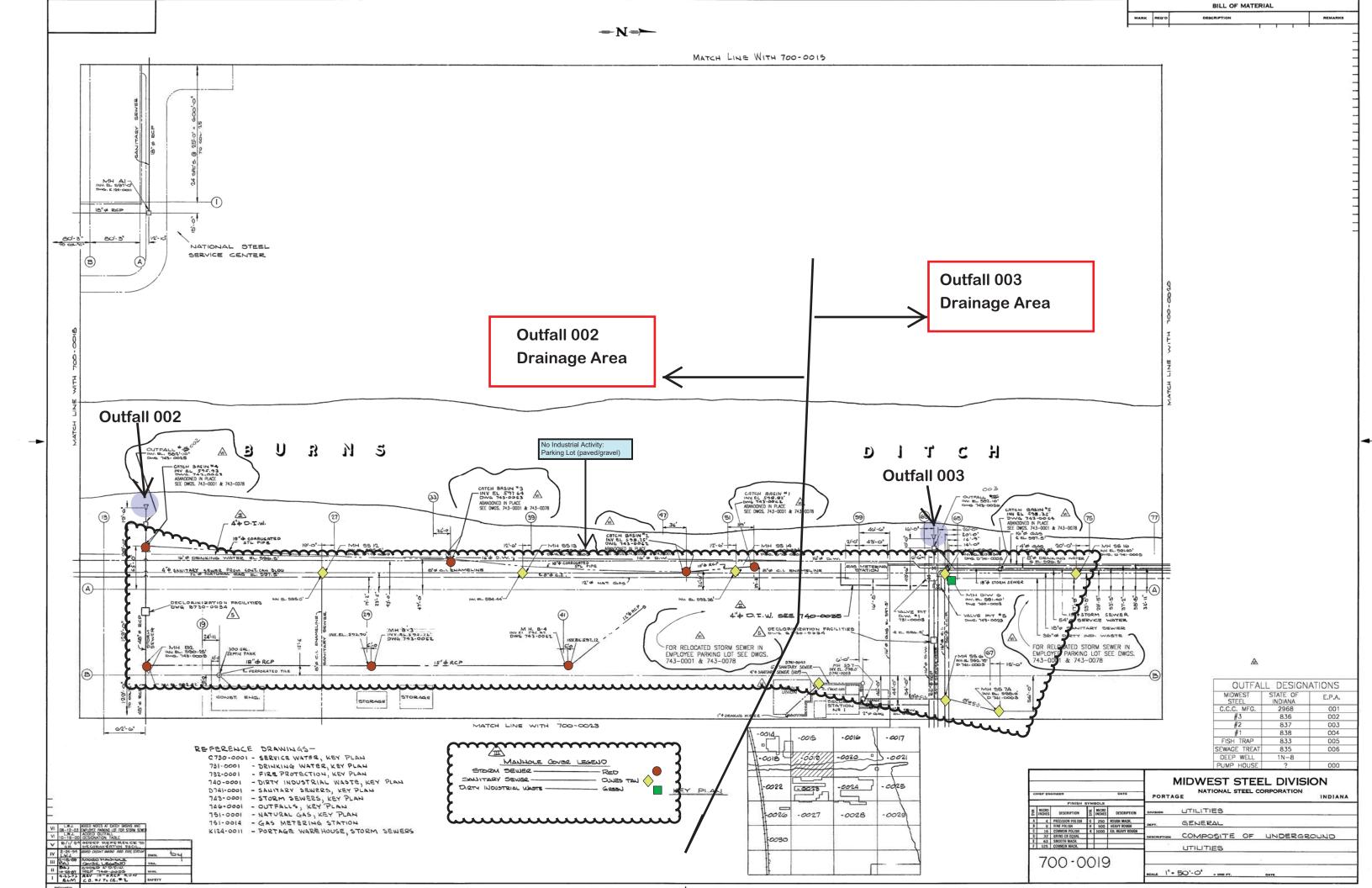
### **SITE MAP**

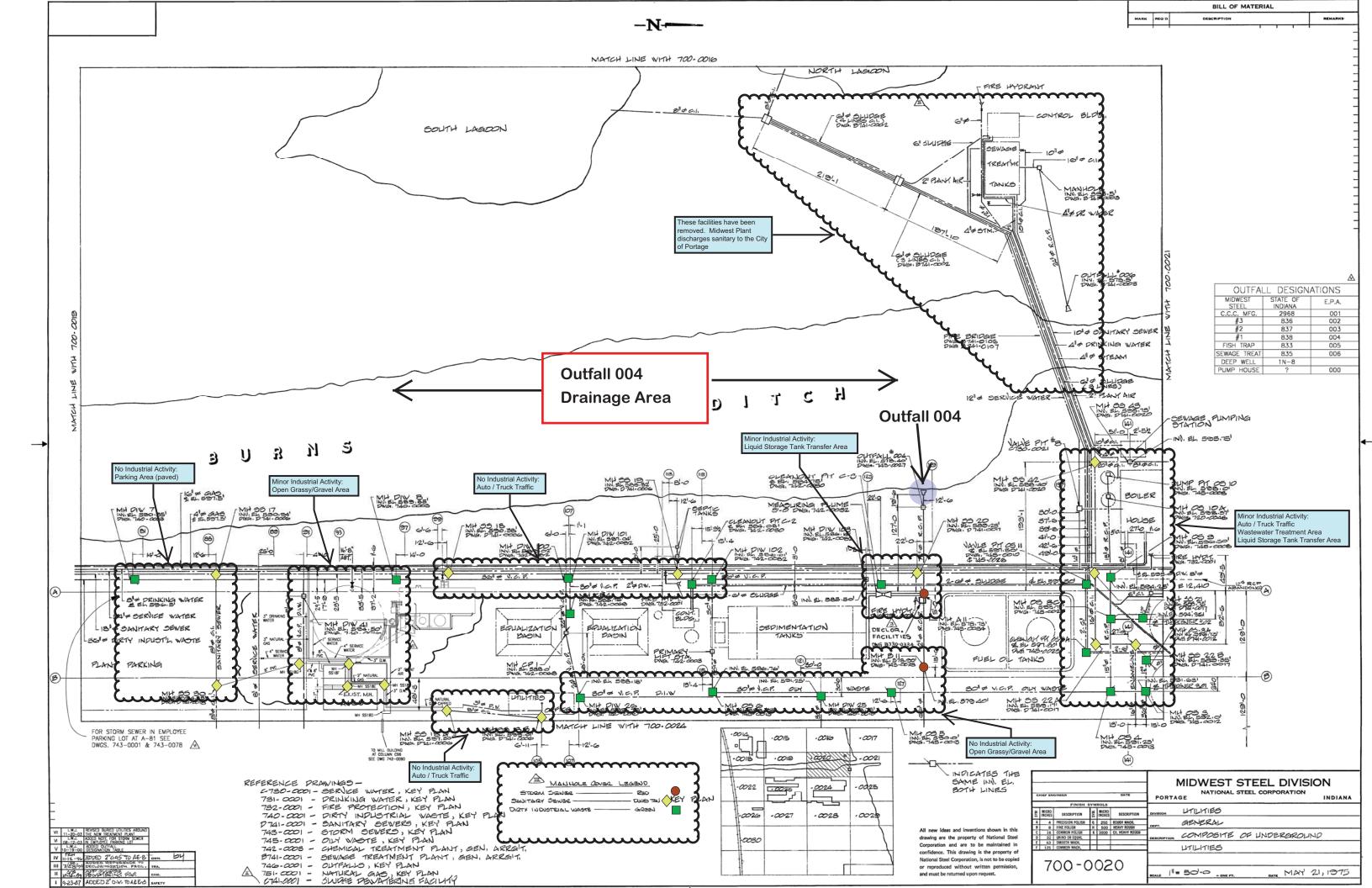


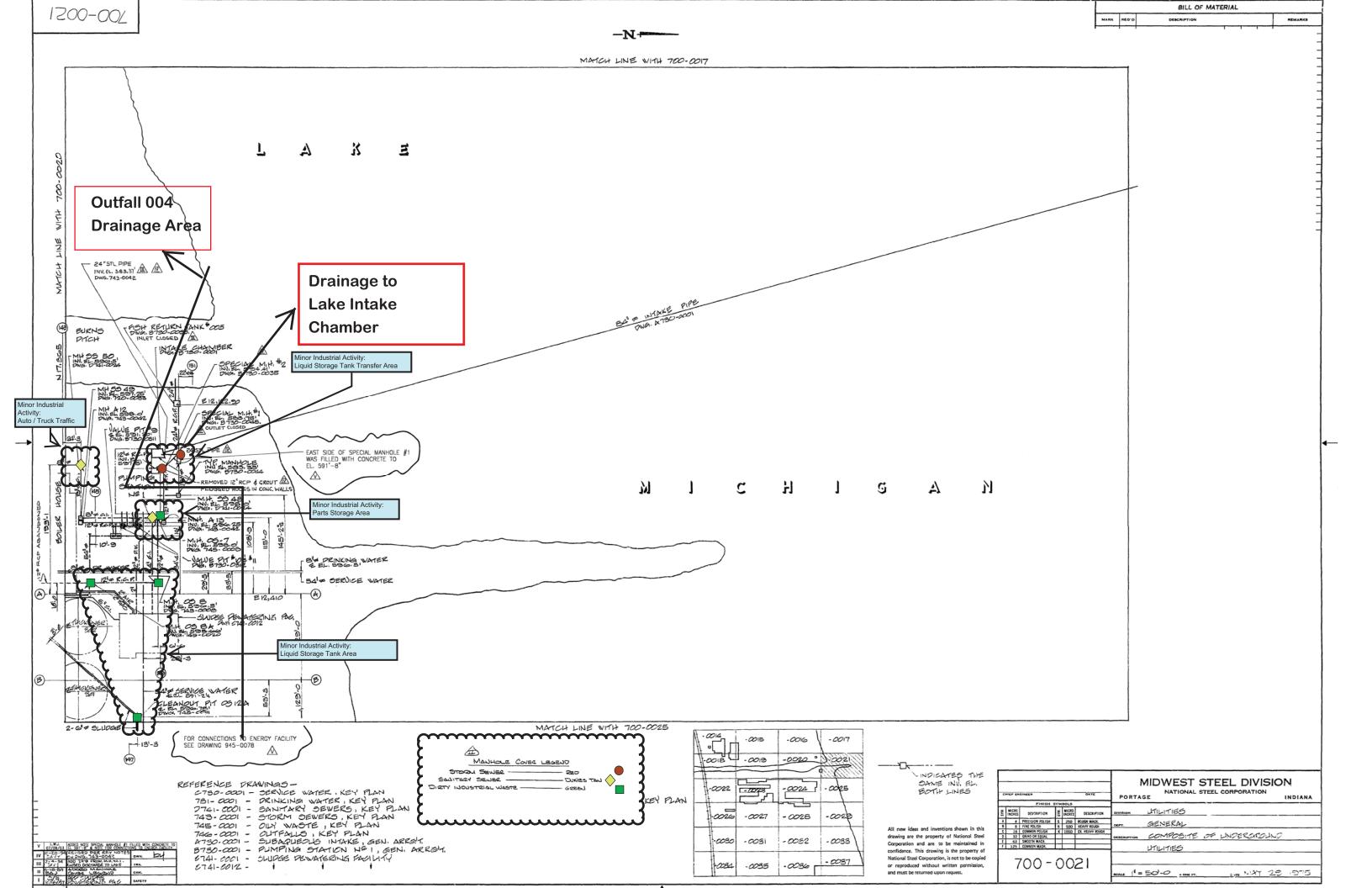


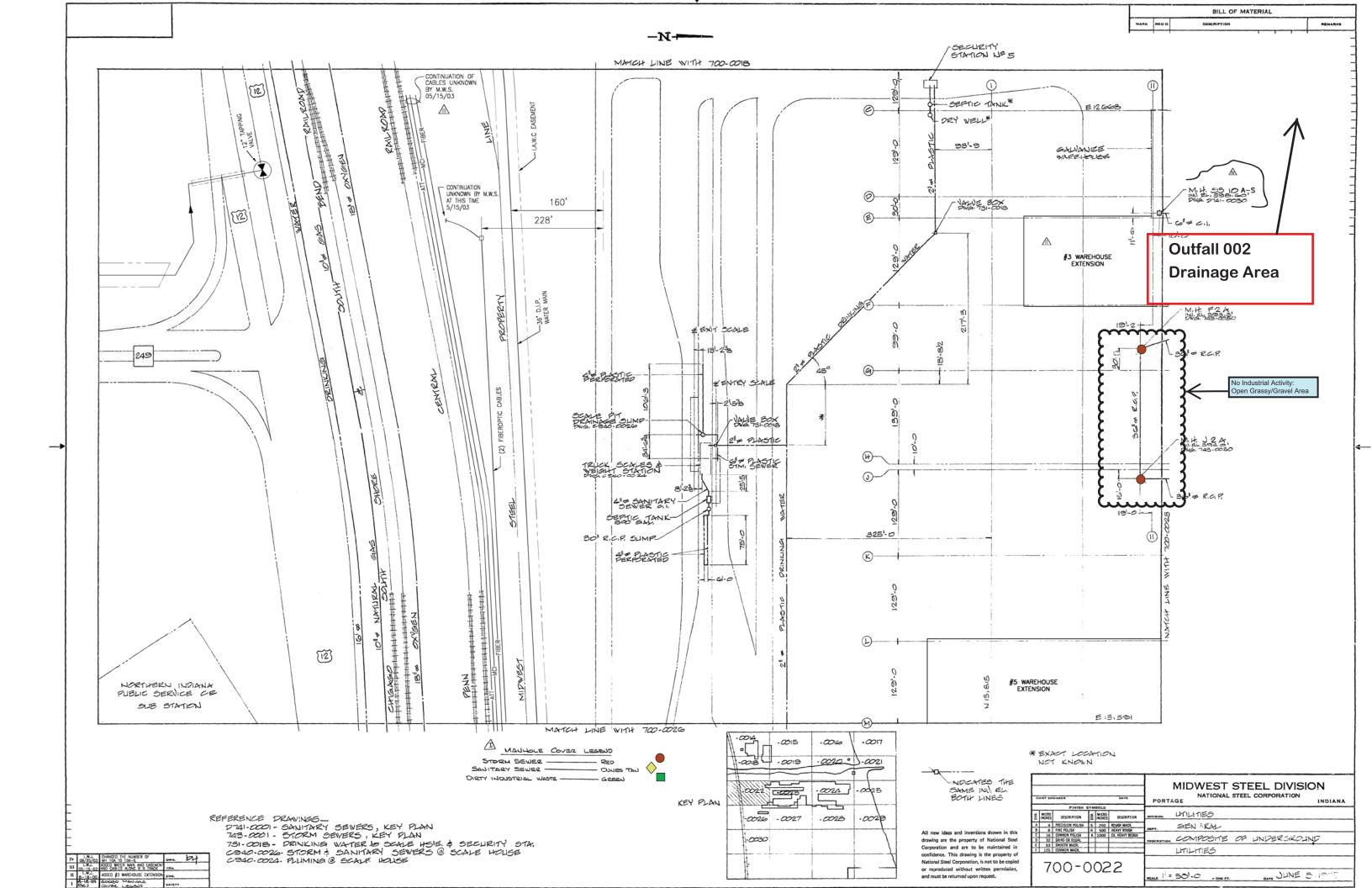


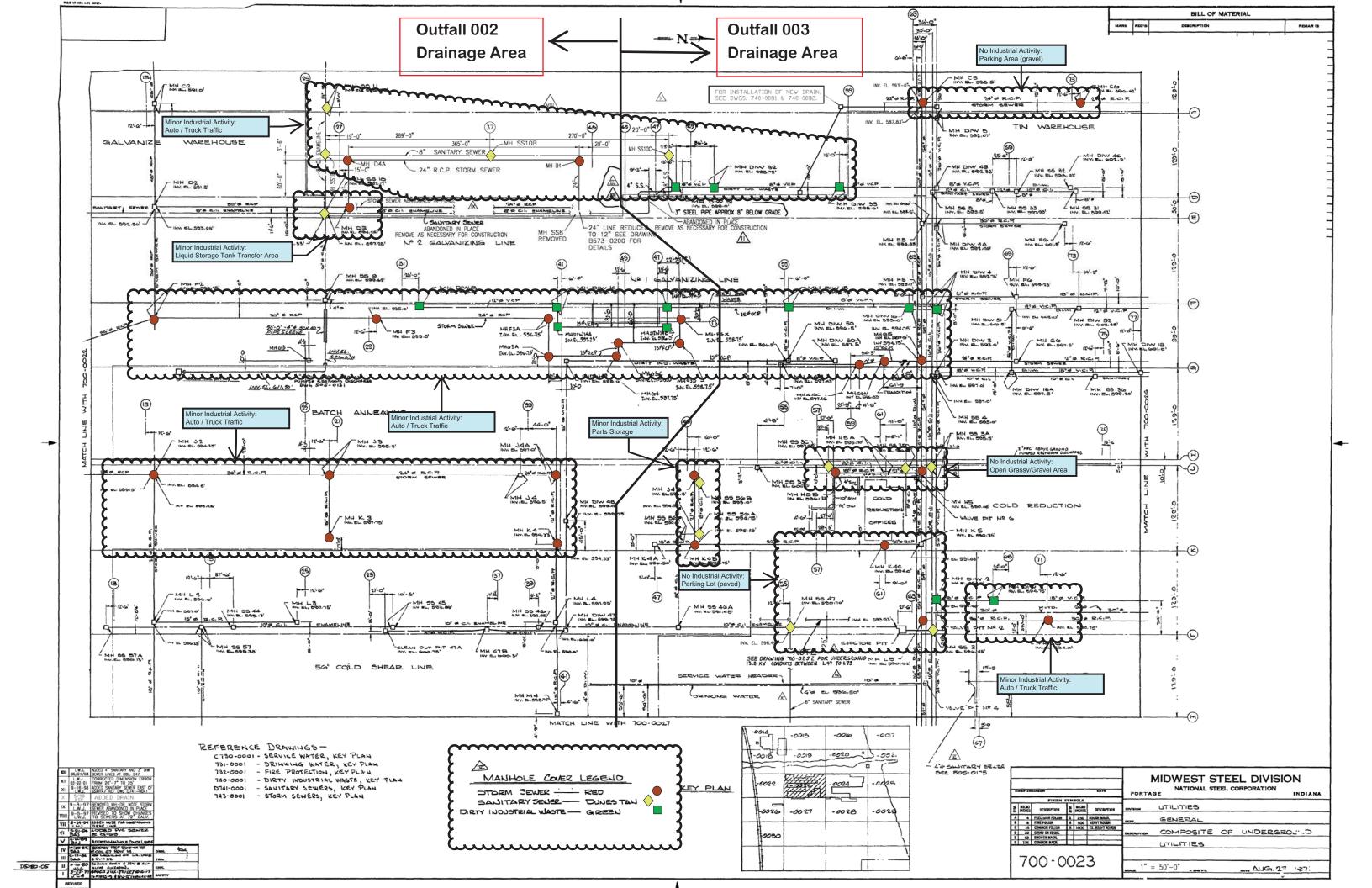
## PLANT STORM WATER DRAINAGE MAPS

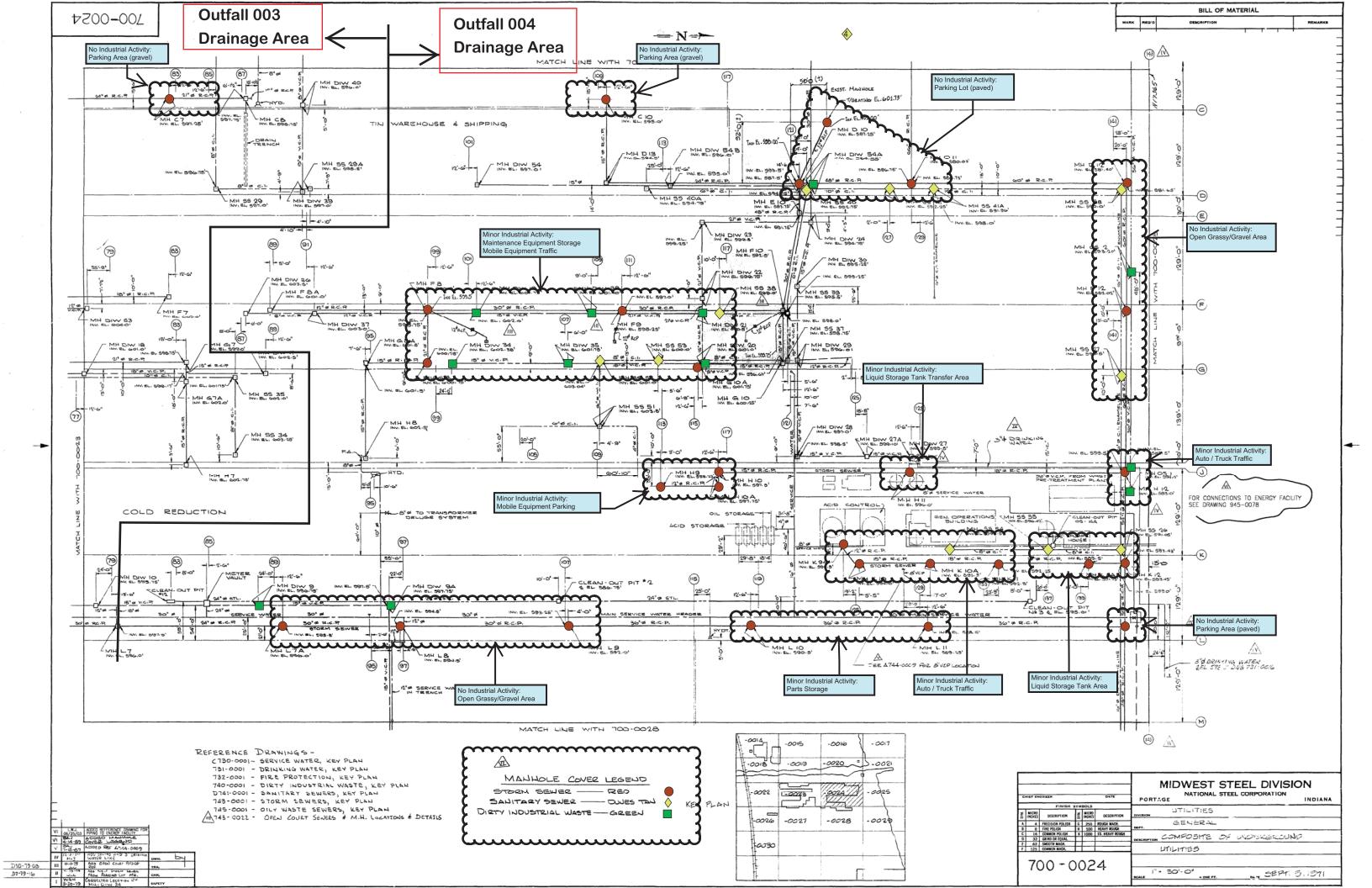


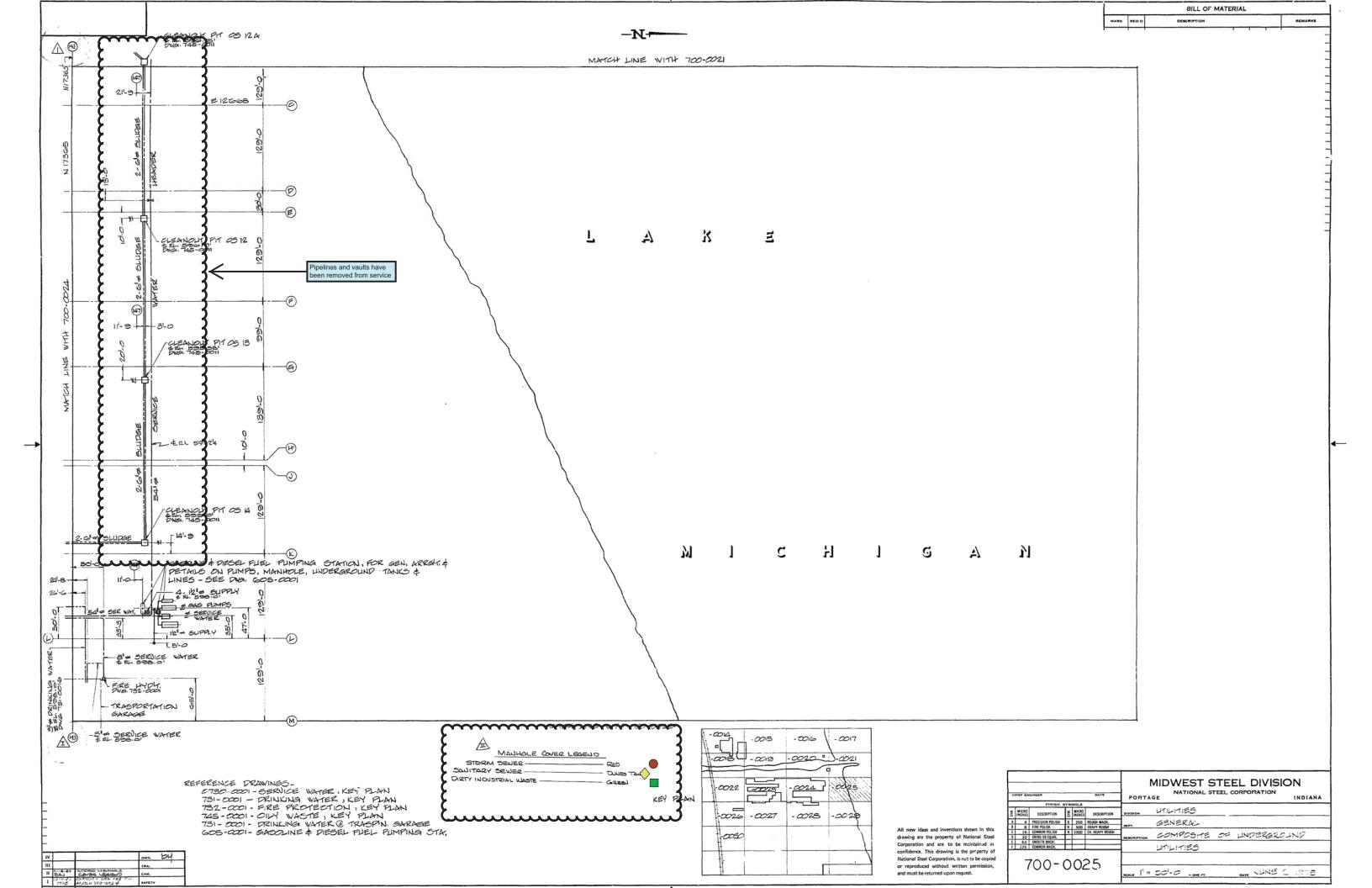


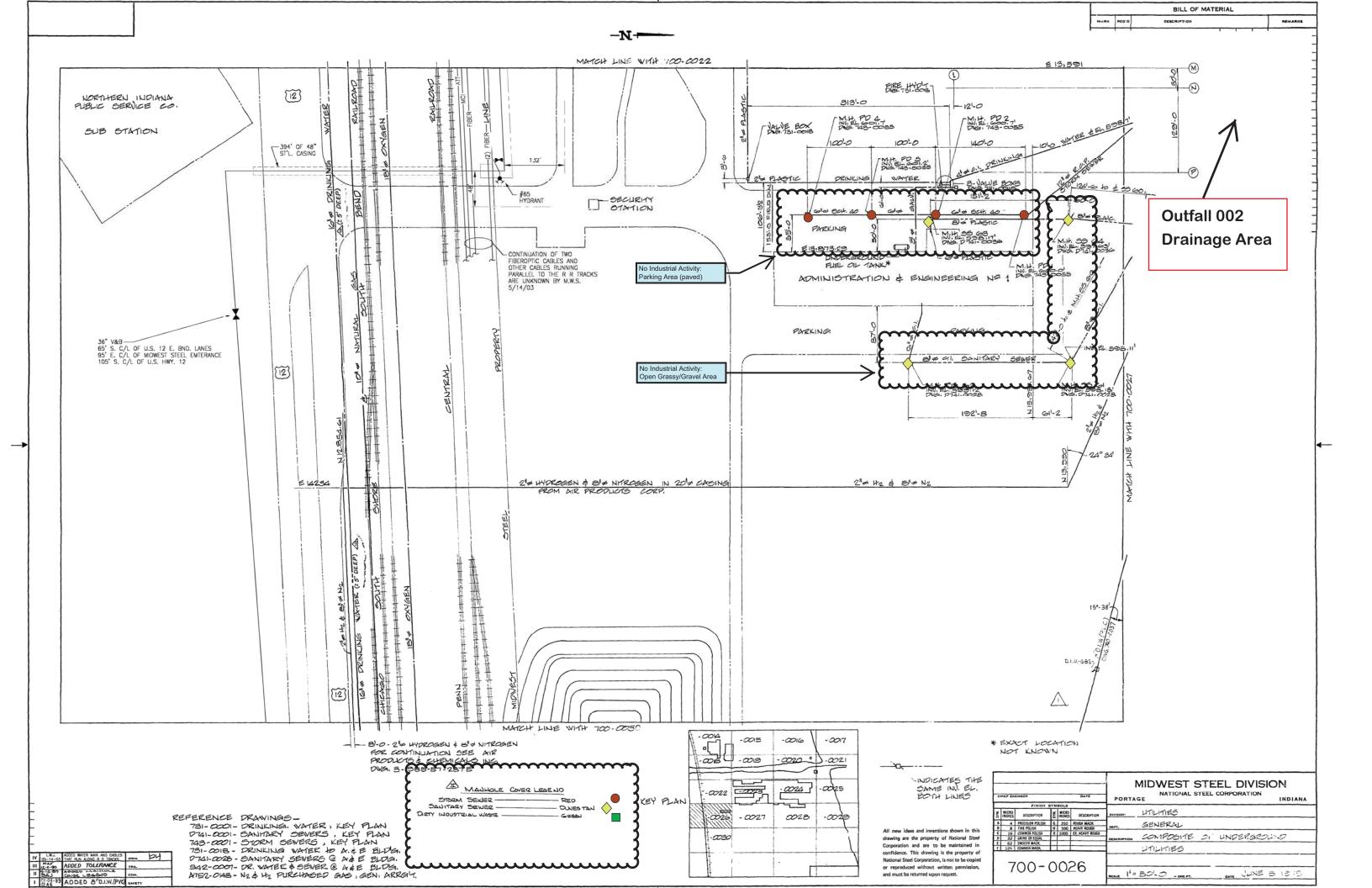


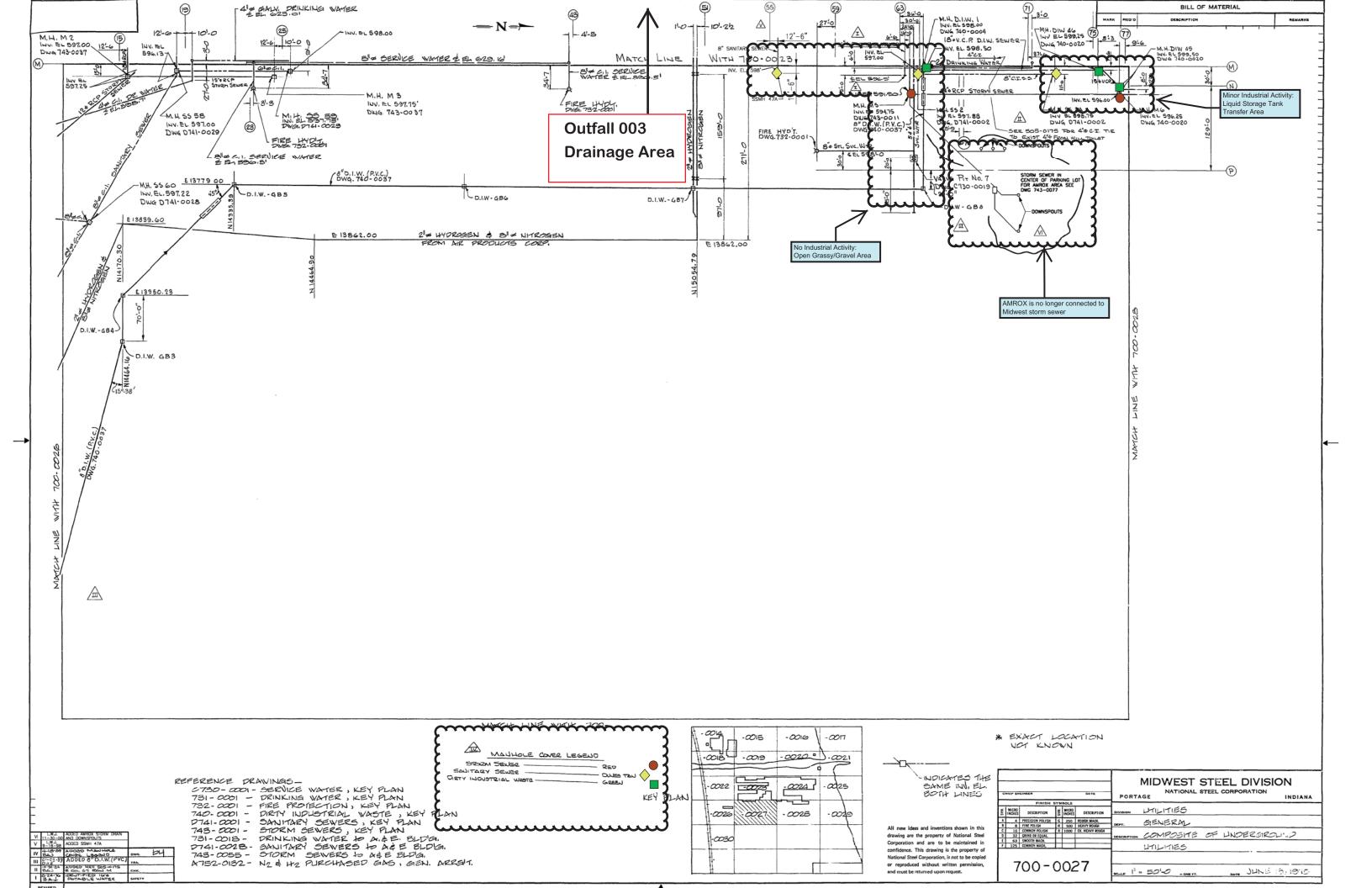


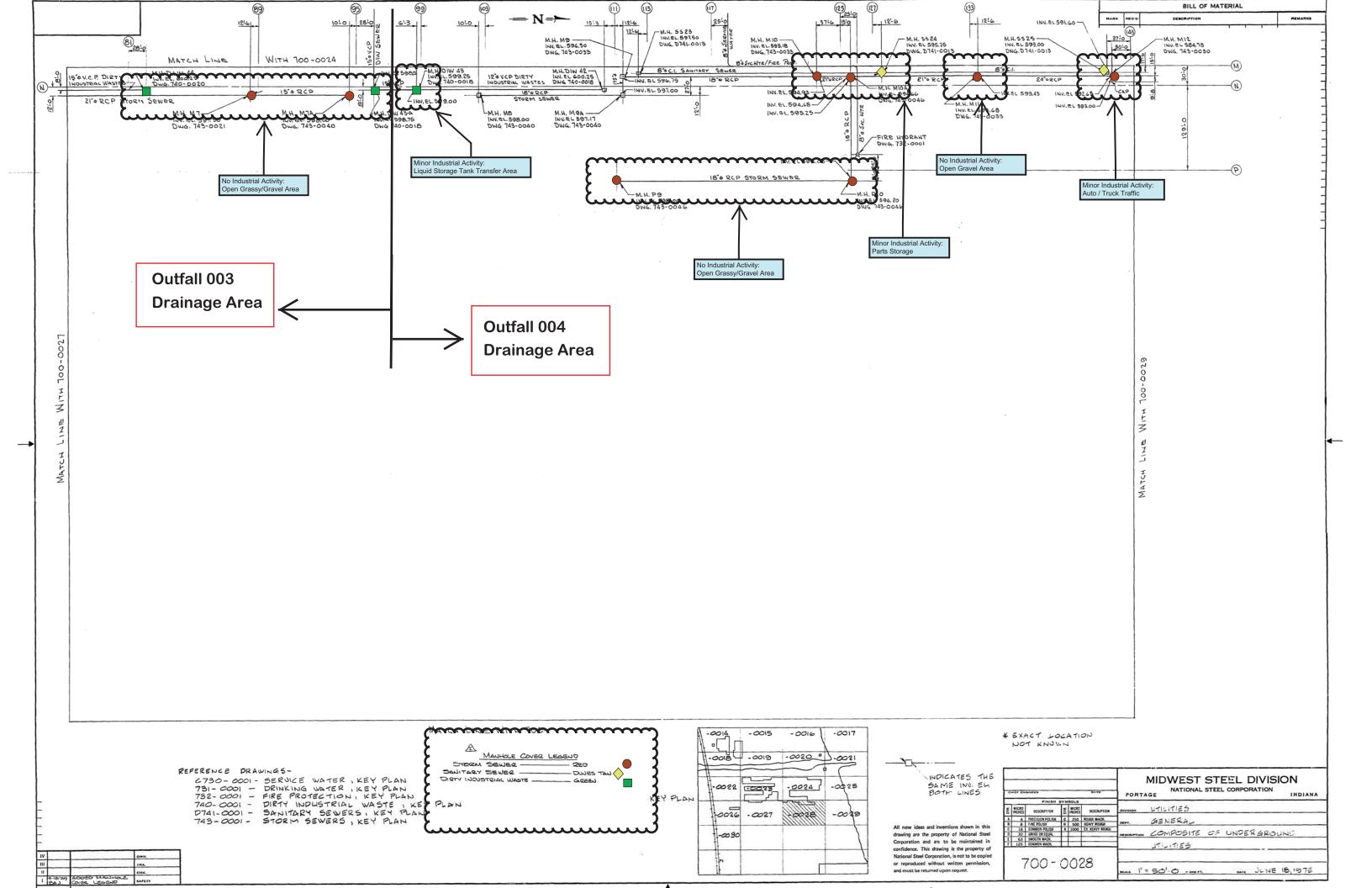




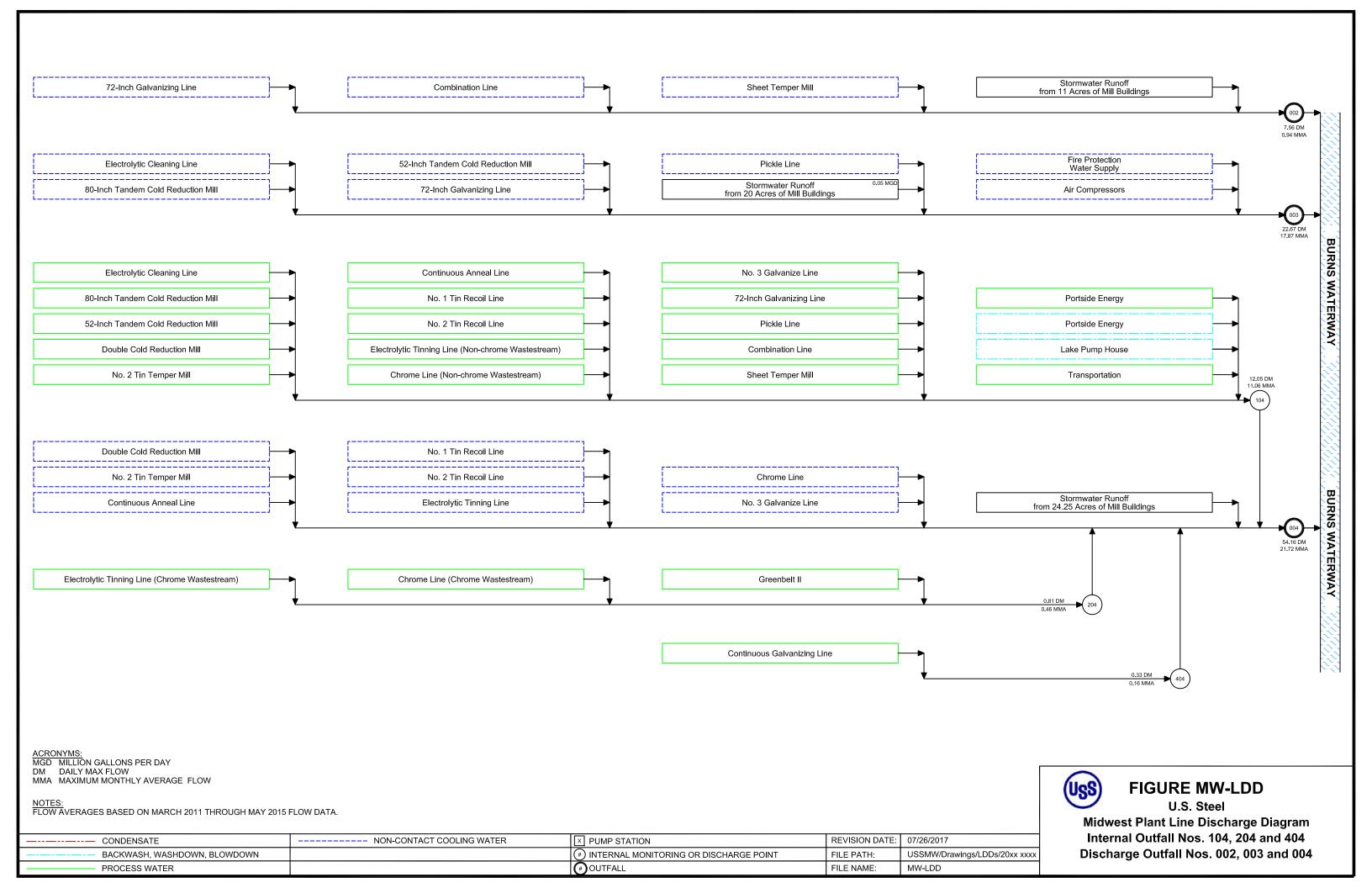








# LINE DISCHARGE DIAGRAM (LDD)



# USGS AREA TOPOGRAPHIC MAP

# U.S. STEEL MIDWEST PLANT AND SURROUNDS



# **USDA SOIL MAP**



### MAP LEGEND

### Area of Interest (AOI)

Area of Interest (AOI)

### Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

### Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

### \_\_\_\_

Spoil Area

Stony Spot

Wery Stony Spot

Wet Spot

∆ Other
Special Line Features

### **Water Features**

Streams and Canals

### Transportation

+++ Rails

Interstate Highways

US Routes

Major Roads

Local Roads

### Background

Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15.800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Porter County, Indiana Survey Area Data: Version 20, Sep 15, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 13, 2012—Mar 28, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# **Map Unit Legend**

	Porter County, In	diana (IN127)	
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Du	Dune land	1.3	0.1%
Mm	Maumee loamy sand	6.1	0.5%
Мр	Milford silty clay loam, 0 to 2 percent slopes	34.9	3.1%
OaC	Oakville fine sand, 4 to 12 percent slopes	17.3	1.6%
OaE	Oakville fine sand, 18 to 40 percent slopes	32.5	2.9%
So	Suman silt loam	5.5	0.5%
UcG	Udorthents, loamy, 3 to 30 percent slopes	10.0	0.9%
UpB	Urban land-Psamments complex, 0 to 6 percent slopes	835.5	75.2%
W	Water	32.4	2.9%
We	Warners silt loam	29.8	2.7%
Totals for Area of Interest		1,110.7	100.0%

# USFWS AREA WETLANDS MAP

# PISHA WHOLIPE SHRVEE

# U.S. Fish and Wildlife Service

# **National Wetlands Inventory**

# U.S. STEEL MIDWEST PLANT



March 8, 2017

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other Riverine This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

# **APPENDIX B-1**

# SPCC Plan Oil Storage Container Inventories

# Spill Prevention, Control Countermeasure (SPCC) Plan APPENDIX B-1 - OIL STORAGE TANKS AND CONTAINERS INVENTORY

Ref ID	CONTENTS	CAPACITY (gal)	Col ID	Col#	CONSTRUCTION MATERIAL	CONTAINMENT TYPE
CONT-AMS-TK01	Diesel Fuel	300	L	137	Steel	Catch basin
CONT-AMS-TK02	Diesel Fuel	300	L	137	Steel	Catch basin
CONT-KM-TK03	Diesel Fuel	350	L	137	Steel	Catch basin
CONT-KM-TK04	Diesel Fuel	350	L	137	Steel	Catch basin
CONT-ST-TK05	Diesel Fuel	350	0	0	Steel	Catch basin
TRANS-SA01	Mobilgard 450	55	М	139	LDPE Plastic	Building
TRANS-TK01	Citgo RD-943 (SAE 40)	250	М	139	Steel	Building
TRANS-TK02	Antifreeze 50/50 mix	288	М	139	Welded steel	Building
TRANS-TK03	Citgard 600 Motor Oil, SAE 15W-40	288	М	139	Steel	Building
TRANS-TK04	Citgo A/W Hydraulic Oil 32	288	М	139	Welded steel	Building
TRANS-TK05	Citgo Transgard Multi-Purpose ATF	288	М	139	Welded steel	Building
TRANS-TK06	Diesel	500	L	139	Welded steel	Catch basin
TRANS-TK08	Unleaded Gasolines, All Grades	1000	L	139	Welded steel	Concrete dike
TRANS-TK09	Biodiesel	1200	L	139	Steel	Concrete dike
TRANS-TK11	Used Oil	350	М	139	Plastic	Concrete dike
TS-SA01	Oil Storage area	55	Н	89	Steel	Pan
TS-SA02	Storage Area	55	Н	89	Steel	Pan
TS-TK01	Citgo A/W Hydraulic Oil 60	300	Н	89	Steel	Catch basin
AC-SA01	Supercompressor Fluid 68		D	61		Building
AC-TK01	Supercompressor Fluid 68	250	D	65	Welded steel	Basement
AC-TK02	Supercompressor Fluid 68	375	D	65	Plastic	Catch basin
CM-SA01	Gear Oil	250	Н	111	Steel	Catch basin
CM-SA02	Extra HECLA Gear Oil Super 680	250	Н	117	Steel	Catch basin
CM-SA03	KEROSENE	250	Н	121	Steel	Pit/tray
FP-TK01	Diesel Fuel No. 2, Low Sulfur & Low Sulfur Red	185	K	85	Welded steel	Catch basin
FP-TK02	Diesel Fuel No. 2, Low Sulfur & Low Sulfur Red	185	K	85	Steel	Catch basin
PWWT-SA02	OIL STORAGE	55	K	139	Steel	Building
ULPH-SA01	Storage Area	55	0	0	Steel	Catch basin
GAL3-LD01	Various	5000	0	8	Steel	Building/mill floor
GAL3-SA01	OIL STORAGE	55	0	11	Cast steel	Concrete walls

Midwest Rev: 01 Dec 2015 Page 1 of 6

# Spill Prevention, Control Countermeasure (SPCC) Plan APPENDIX B-1 - OIL STORAGE TANKS AND CONTAINERS INVENTORY

Ref ID	CONTENTS	CAPACITY (gal)	Col ID	Col#	CONSTRUCTION MATERIAL	CONTAINMENT TYPE	
GAL3-SA02	OIL STORAGE	55	N	7	Welded steel	Catch basin	
GAL3-TK09	Ferrocote 61A US	5000	0	11	Welded steel	Built-in Rectangular dike	
GAL3-TK10	Rustilo DW 924 HF	5000	0	11	Cast steel	Built-in Rectangular dike	
GAL3-TK21	EP Compound 220	600	N	7	Welded steel	Curbed steel pan	
GAL3-TK22	Citgo A/W 46	600	N	7	Steel	Catch basin	
48GL-TK06	Out-of Service	600	G	113	Welded steel	Building	
48GL-TK07	Out-of-Service	600	G	113	Steel	Mill floor/Building	
48GL-TK08	Out-of-Service	600	F	29	Steel	Pan	
GACT-LD01	VARIETY OF OILS	5000	E	27	Steel	Pit/tray	
GACT-SA03	OIL STORAGE	55	Е	27	Steel	Catch basin	
GACT-SA08	OIL STORAGE	300	F	5	Steel	Building	
GACT-SA10	OIL STORAGE	55	Е	19	Plastic	Building	
GACT-SA11	Used Oil	330	F	37	Plastic	Catch basin	
GACT-SA12	Storage Area		F	37		Building	
GACT-TK01	Citgo Hydraulic Oil AW 68	440	E	61	Welded steel	Catch basin	
GACT-TK02	Citgo Hydraulic Oil AW 68	440	E	61	Welded steel	Catch basin	
GACT-TK03	Citgo Hydraulic Oil AW 68	450	E	23	Welded steel	Catch basin	
GACT-TK04	Citgo A/W 46 oil	500	D	35	Welded steel	Building	
GACT-TK07	Vanishing Oil (Rustilo DW 924HF)	750	Е	27	Steel	Concrete dike	
GACT-TK08	Montgomery PL 7105-A (RED)	345	E	27	Steel	Berm	
GACT-TK09	FERROCOTE 61 MALHCL1	400	E	27	Welded steel	Catch basin	
GACT-TK10	COATING OIL (Ferrocote 61 AUS)	1100	Е	27	Steel	Berm	
GACT-TK11	COATING OIL (Ferrocote 61 AUS)	1100	Е	27	Welded steel	Catch basin	
GACT-TK13	VULSOL MW SOLVENT CLEANER	330	F	35	Welded steel	Catch basin	
GACT-TK35	COATING Oil	6,000	E	27		Building	
CRS5-LD01	Transfer Area	5000	K	69	Steel	Mill floor/Building	
CRS5-SA03	Various Olis		Н	77		Building	
CRS5-TK14A	ROLLKLEEN Dp-2081 MW	8000	K	77	Welded steel	Catch basin	
CRS5-TK14B	ROLLKLEEN Dp-2081MW	8000	K	77	Welded steel	Catch basin	
CRS5-TK19	Mobillube HD 85W-140	950	K	69	Welded steel	Building/Basement	

Midwest Rev: 01 Dec 2015 Page 2 of 6

# Spill Prevention, Control Countermeasure (SPCC) Plan APPENDIX B-1 - OIL STORAGE TANKS AND CONTAINERS INVENTORY

Ref ID	CONTENTS	CAPACITY (gal)	Col ID	Col#	CONSTRUCTION MATERIAL	CONTAINMENT TYPE
CRS5-TK21	Tempershield 57LO	500	K	69	Plastic	Building/Basement
CRS5-TK22	Citgo A/W 32	350	K	69	Steel	Catch basin
CRS5-TK23A	Mobil DTE Oil Light	500	I	69	Welded steel	Building
CRS5-TK23B	Mobil DTE Oil Light	500	I	69	Welded steel	Building
CRS5-TK24	Hydrashield		K	69		Building
RCCM-SA01	Oil Storage area	330	L	47	Welded steel	Catch basin
RCCM-SA04	EP Compound 150	55	L	37	Welded steel	Catch basin
RCCM-SA05	Castrol Rustilo DW 924 HF	350	L	31	Welded steel	Catch basin
RCCM-TK01	Vulsol MW Solvent Cleaner	530	L	37	Welded steel	Building/Basement
RCCM-TK02	Vulsol MW Solvent Cleaner	549	L	37	Welded steel	Building/Basement
RCCM-TK03	Citgo A/W 68	1496	L	37	Welded steel	Building
RCCM-TK04	Citgo A/W 68	1400	L	27	Steel	Building
RCCM-TK05A	Ferrocote 61 MAL HCL 1	2393	L	31	Welded steel	Basement
RCCM-TK05B	Rustilo DW 924 HF	2393	L	31	Steel	Building/mill floor
RCCM-TK05C	Montgomery RP-4107-AV	2393	L	31	Steel	Building/mill floor
RCCM-TK06A	Ferrocote 61A US	4862	L	31	Welded steel	Building/mill floor
RCCM-TK06B	DOS Oil	1000	L	31	Welded steel	Building/mill floor
RCCM-TK06C	NOX-Rust X-111	1500	L	31	Steel	Building/mill floor
GACT-TK06	Hydraulic Oil AW 68	500	G	133	Welded steel	Catch basin
PKLM-LD01	Transfer area	5000	М	73	Steel	Catch basin
PKLM-LD02	Mobil DTE 24	3000	М	103	Steel	Building
PKLM-LD04	Mobil Hydraulic oil AW 68	3000	L	115	Steel	Building
PKLM-SA04	Drum & Tote storage area	55	N	99	Steel	Catch basin
PKLM-SA08	Grease drums & cart storage area	55	L	85	Steel	Catch basin
PKLM-SA09	Oil Storage area	55	L	73	Steel	Catch basin
PKLM-SA11	Grease		L	73		Building
PKLM-SA12	KEROSENE		Р	103		Building
PKLM-SA13			М	80		Building
PKLM-TK14, TK15, TK29, TK30	MOBIL AW68	1600	N	109	Welded steel	Catch basin
PKLM-TK20	Citgo A/W 68 oil	900	М	71	Welded steel	Basement

Midwest Rev: 01 Dec 2015 Page 3 of 6

# Spill Prevention, Control Countermeasure (SPCC) Plan APPENDIX B-1 - OIL STORAGE TANKS AND CONTAINERS INVENTORY

Ref ID	CONTENTS	CAPACITY (gal)	Col ID	Col#	CONSTRUCTION MATERIAL	CONTAINMENT TYPE	
PKLM-TK21	Citgo A/W 68 oil	900	М	71	Welded steel	Basement	
PKLM-TK27	COATING OIL	16000	М	71	Steel	Basement	
PKLM-TK31	Mobil Hydraulic Oil AW 68	450	М	111	Steel	Building	
PKLM-TK32	Citgo A/W hydraulic Oil 32	350	М	105	Welded steel	Catch basin	
TMSM-LD01	Transfer station for filling TMSM-TK12	5000	L	49	Steel	Concrete dike	
TMSM-LD02	Transfer station for filling indoor tanks	5000	K	53	Steel	Building	
TMSM-SA01	Oil Storage area	55	J1	49	Steel	Pan	
TMSM-SA02	Drum Storage area	55	K	47	Steel	Building	
TMSM-SA03	Drum Storage Area	55	L	43	Steel	Building	
TMSM-TK03	Citgo A/W 32	1200	J1	49	Welded steel	Building/Basement	
TMSM-TK04	Tempershield 97-MW	1800	J1	49	Welded steel	Catch basin	
TMSM-TK05	Vulcan CRPS-90MW Pickle Oil	1000	J1	47	Welded steel	Basement	
TMSM-TK07	Hydrashield MW	960	J1	47	Welded steel	Building/Basement	
TMSM-TK08	Ferrocote 61 MALHCI1	1800	J1	47	Welded steel	Concrete dike	
TMSM-TK09	Ferrocote 61A US	2400	K	45	Welded steel	Catch basin	
TMSM-TK10	Ferrocote 61A US	2000	K	45	Welded steel	Building	
TMSM-TK11	Ferrocote 61 MALHCI1	500	K	45	Welded steel	Catch basin	
TMSM-TK12	Tempershield 97-MW	4000	L	47	Welded steel	Building	
TMSM-TK13	Mobil Hydraulic Oil AW 68	960	Н	45	Welded steel	Building	
RS-SA01	Tote & Drum Storage area	55	F	73	Steel	Building	
RS-SA02	Tote Storage area	350	F	79	Welded steel	Building	
RS-SA03	Used Oil		F	87		Building	
RS-SA05	CP-30G	55	G	93	Steel	Building	
RS-TK02	Rollgrind 101M Coolant	3000	F	79	Plastic	Building	
RS-TK04	Citgo Hydraulic oil 32	500	F	79	Welded steel	Building	
RS-TK05	SlideRite 220	350	F	87	LDPE Plastic	Building	
RS-TK06	Lubricating Oil	500	F	87		Building	
TFG-SA01	Mobilith AW-2	55	E	113	Steel	Building	
CRT5-LD01	VARIETY OF OILS	55	K	85	Steel	Concrete dike	
CRT5-SA03	OIL STORAGE	500	L	85	Steel	Catch basin	

Midwest Rev: 01 Dec 2015 Page 4 of 6

# Spill Prevention, Control Countermeasure (SPCC) Plan APPENDIX B-1 - OIL STORAGE TANKS AND CONTAINERS INVENTORY

Ref ID	CONTENTS	CAPACITY (gal)	Col ID	Col#	CONSTRUCTION MATERIAL	CONTAINMENT TYPE
CRT5-TK10	Rollshield 316M	10000	K	83	Welded steel	Basement
CRT5-TK15A	Hydrashield MW	470	K	81	Welded steel	Catch basin
CRT5-TK15B	Hydrashield MW	470	K	81	Welded steel	Catch basin
CP-TK02	Mobil Hydraulic Oil AW 68	230	E	85	Welded steel	Building
ETCM-SA05	OIL STORAGE	55	E	95	Steel	Building
ETCM-SA09	OIL STORAGE	55	D	93	Steel	Building
ETCM-TK02	Citgo A/W 68 oil	600	E	105	Welded steel	Portable containment; Building/mill floor
ETCM-TK05	Citgo A/W 68 oil	600	E	91	Welded steel	Drip pan; Basement/mill floor
ETCM-TK22	USED OIL	330	Е	95	Plastic	Basement
CLNM-TK01	Citgo Hydraulic Oil AW 68	500	G	81	Welded steel	Catch basin
CLNM-TK03	Citgo Hydraulic oil AW 68	500	G	73	Welded steel	Catch basin
CLNM-TK04	EP Compound 320	500	G	69	Welded steel	Catch basin
CLNM-TK05	300 CITGO A/W HYDRAULIC OIL	500	G	69	Welded steel	Catch basin
ANCA-SA03	OIL STORAGE	55	G	119	Steel	Building
ANCA-TK04	Citgo A/W 68	500	G	119	Steel	Building
DCRM-SA01	Drum & Tote Storage area	55	F	131	Steel	Building
DCRM-SA05	VARIOUS OILS	600	G	123	Steel	Building/mill floor
DCRM-TK09A, TK09B, TK09C	Hydroshield	330	F	125	Stainless steel	Portable Containment/Building/Mill Floor
DCRM-TK10	Solvo Clean TLS	500	F	125	Steel	Catch basin
DCRM-TK11A, TK11B	KS 8-2000B	500	F	129	Welded steel	Pit/tray
DCRM-TK13	Citgo EP compound 320	450	G	125	Steel	Building/Basement
RCL1-TK01	Citgo Hydraulic Oil AW 68	600	F	125	Welded steel	Building
RCL2-SA02	Drum & Tote Storage area	500	E	132	Welded steel	Portable Containment/Building/Mill Floor
RCL2-SA03	Drum Storage area	55	Е	127	Steel	Building
RCL2-TK01	Citgo a/w 68	450	Е	129	Steel	Building
ETLM-SA02	OIL STORAGE	55	F	87	Welded steel	Building
ETLM-TK01	Citgo Hydraulic Oil A/W 68	600	F	113	Welded steel	Building/mill floor
ETLM-TK02	Citgo HYDRAULIC OIL AW 68	500	F	113	Steel	Catch basin
ETLM-TK09	VACTRA OIL AW 68	500	F	87	Welded steel	Building

Midwest Rev: 01 Dec 2015 Page 5 of 6

# Spill Prevention, Control Countermeasure (SPCC) Plan APPENDIX B-1 - OIL STORAGE TANKS AND CONTAINERS INVENTORY

Ref ID	CONTENTS	CAPACITY (gal)	Col ID	Col#	CONSTRUCTION MATERIAL	CONTAINMENT TYPE
ETLM-TK10	Mobil Hydraulic Oil AW 68	600	F	87	Welded steel	Building/mill floor
ETLM-TK11	Mobil Hydraulic oil AW 68	500	F	87	Welded steel	Portable containment
TMTM-SA01	Storage Area		G	137		Building
TMTM-SA02	Various Oils		F	137		Building
TMTM-SA03	Storage Area		G	139		Building
TMTM-TK07A, B, C	Hydrashield MW	550	F	133	Welded steel	Pit/tray
TMTM-TK08	Solvo Clean TLS	330	G	133	Welded steel	Portable Containment/Building/Mill Floor
TMTM-TK09	EP compound 320	450	G	135	Welded steel	Building/mill floor

Midwest Rev: 01 Dec 2015 Page 6 of 6

# **Midwest Plant SPCC Process Equipment Inventory**

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment	
2 Tin Temper					
TMTM-TK01	East Backup Lube	15000	Indoor	Basement	
TMTM-TK02	West Backup Lube	15000	Indoor	Basement	
TMTM-TK03	Screwdown Oil System	400	Indoor	Basement	
TMTM-TK04	Outboard Support Arm Bearing	250	Indoor	Basement	
TMTM-TK05	Hydraulic System Tank	3000	Indoor	Basement	
TMTM-TK06	MG Lube Set	400	Indoor	Basement	
3CL					
GAL3-GB01	Delivery Looping Tower Gearbox		Indoor	Building	
GAL3-GB02	Entry Looping Tower Gearbox		Indoor	Building	
GAL3-GB03	#1 Payoff Reel Gearbox		Indoor	Building	
GAL3-GB04	#2 Payoff Reel Gearbox		Indoor	Building	
GAL3-PS07	Entry End hyraulic system virgin storage	55	Indoor	Building	
GAL3-TK01	Entry end Hydraulic system	350	Indoor	Curbing	
GAL3-TK02	Entry end Askania	100	Indoor	Curbing	
GAL3-TK03	Entry Tower Askania #1 & #2 system	50	Indoor	Building	

Appendix B-1

Page 1 of 15

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment	
L					
GAL3-TK06	#4 Steering roll hydraulic system	35	Indoor	Curbing	
GAL3-TK07	Skin Pass Mill Hydraulic system	500	Indoor	Curbing	
GAL3-TK08	Delivery Tower Askania #1 & #2 systems	50	Indoor	Building	
GAL3-TK11	Delivery end hydraulic system	350	Indoor	Curbing	
GAL3-TK12	Delivery end Askania #1 & #2	100	Indoor	Curbing	
GAL3-TK14	Strip Oil - Day Tank #2	100	Indoor	Curbing	
GAL3-TK15	Vanishing Oil - Day Tank #1	100	Indoor	Curbing	
GAL3-TK17	GFG Acrylic Coater hydraulic tank	60	Indoor	Building	
GAL3-TK18	GFG Acrylic Coater hydraulic tank	60	Indoor	Building	
" 5 Stand					
CRT5-TK01	Morgoil East	5000	Indoor	Basement	
CRT5-TK02	Morgoil West	5000	Indoor	Basement	
CRT5-TK03	Morgoil #2 North	16000	Indoor	Basement	
CRT5-TK04	Morgoil #2 South	16000	Indoor	Basement	
CRT5-TK05	Circulating System 3	4000	Indoor	Basement	
CRT5-TK06	Circulating System 4	4000	Indoor	Basement	

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment
" 5 Stand				
CRT5-TK07	Auxillary Hydraulic Tank	2872	Indoor	Basement
CRT5-TK14	Stand 1 Screwdown Hydraulic Tank	1000	Indoor	Basement
" Galv Line				
GACT-GB01	#1 Payoff Reel		Indoor	Basement
GACT-GB02	#2 Payoff Reel		Indoor	Basement
GACT-GB03	Top Scrap Chopper		Indoor	Basement
GACT-GB04	Bottom Scrap Chopper		Indoor	Basement
GACT-GB05	Bottom Scrap Chopper Pinch Roll		Indoor	Basement
GACT-GB06	Top Scrap Chopper Pinch Roll		Indoor	Basement
GACT-GB07	#1 Payoff Levelor		Indoor	Mill floor/Building
GACT-GB08	#2 Payoff Levelor		Indoor	Mill floor/Building
GACT-GB09	#1 Bridle Entry		Indoor	Building
GACT-GB10	#1 Bridle Exit		Indoor	Basement; Area sump
GACT-GB11			Indoor	Basement
GACT-GB12	#2 Bridle Exit		Indoor	Basement
GACT-GB13	#2 Bridle Entry		Indoor	Basement

Appendix B-1 Page 3 of 15

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment	
" Galv Line					
GACT-GB14	#3 Bridle Entry		Indoor	Basement	
GACT-GB15	#3 Bridle Exit		Indoor	Basement	
GACT-GB16	#5 Bridle #2 Roll		Indoor	Building	
GACT-GB17	#5 Bridle #1 Roll		Indoor	Building	
GACT-GB18	#5 Bridle #3 Roll		Indoor	Building	
GACT-GB19	#5 Bridle #4 Roll		Indoor	Building	
GACT-GB20	Skin Pass Mill - Bottom		Indoor	Building	
GACT-GB21	Skin Pass Mill - Top		Indoor	Building	
GACT-GB22	#6 Bridle #1 Roll		Indoor	Building	
GACT-GB23	#6 Bridle #2 Roll		Indoor	Building	
GACT-GB24	#7 Bridle #2 Roll		Indoor	Building	
GACT-GB25	#7 Bridle Hybrid Bridle		Indoor	Building	
GACT-GB26	#7 Bridle #3 Roll		Indoor	Building	
GACT-GB27	#7 Bridle #4 Roll		Indoor	Building	
GACT-GB28	Exit Looping Tower		Indoor	Building	
GACT-GB29	#8 Bridle #1 Roll		Indoor	Building	

Appendix B-1 Page 4 of 15

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment	
alv Line					
GACT-GB30	#8 Bridle #2 Roll		Indoor	Building	
GACT-GB31	#8 Bridle #3 Roll		Indoor	Building	
GACT-GB32	#8 Bridle #4 Roll		Indoor	Building	
GACT-GB33	#1 Tension Reel		Indoor	Building	
GACT-GB34	#2 Tension Reel		Indoor	Building	
GACT-TK03	Exit Hydraulic Oil storage tank	2500	Indoor	Curbing	
GACT-TK05	Skin Pass Operating	600	Indoor	Building	
GACT-TK12	Exit Hydraulic Unit	750	Indoor	Curbing	
GACT-TK17	Pay Off Reel Operating	750	Indoor	Basement	
GACT-TK19	Welder Hydraulic Tank	230	Indoor	Building	
GACT-TK20	#3 Steering Roll Hydraulic Operating System	40	Indoor	Basement	
GACT-TK21	Tension Reel Askania #1	150	Indoor	Curbing	
GACT-TK22	Tension Reel Askania #2	150	Indoor	Curbing	
GACT-TK23	Coating Oil System 1	95	Indoor	Curbing	
GACT-TK24	Coating Oil System 2	95	Indoor	Curbing	
GACT-TK25	Coating Oil System 3	95	Indoor	Curbing	
		Appendix B-1			Page 5 of

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment	
Galv Line					
GACT-TK26	Coating Oil System 4	95	Indoor	Curbing	
5 Stand					
CRS5-GB01	Payoff Reel		Indoor	Basement	
CRS5-GB02L	Stand #1 - Lower		Indoor	Basement	
CRS5-GB02U	Stand #1 - Upper		Indoor	Basement	
CRS5-GB03L	Stand #2 - Lower		Indoor	Basement	
CRS5-GB03U	Stand #2 - Upper		Indoor	Basement	
CRS5-GB04L	Stand #3 - Lower		Indoor	Basement	
CRS5-GB04U	Stand #3 - Upper		Indoor	Basement	
CRS5-GB05L	Stand #4 - Lower		Indoor	Basement	
CRS5-GB05U	Stand #4 - Upper		Indoor	Basement	
CRS5-GB06L	Stand #5 - Lower		Indoor	Basement	
CRS5-GB06U	Stand #5 - Upper		Indoor	Basement	
CRS5-GB07	Tension Reel		Indoor	Basement	
CRS5-TK01	Morgoil System A East	12000	Indoor	Basement	
CRS5-TK02	Morgoil System A West	12000	Indoor	Basement	

Appendix B-1 Page 6 of 15

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment
" 5 Stand				
CRS5-TK03	Morgoil System B East	14000	Indoor	Basement
CRS5-TK04	Morgoil System B West	14000	Indoor	Basement
CRS5-TK05	Circulating Oil System A North	4000	Indoor	Basement
CRS5-TK06	Circulating Oil System A South	4000	Indoor	Basement
CRS5-TK07	Circulating Oil System B North	2500	Indoor	Basement
CRS5-TK08	Circulating Oil System B South		Indoor	Basement
CRS5-TK09	Auxiliary hydraulic system	5000	Indoor	Basement
CRS5-TK10	Roll Balance hydraulic system	800	Indoor	Basement
CRS5-TK11	Stand One Screwdown hydraulic system	1100	Indoor	Basement
CRS5-TK15	Stand 5 Roll Bend system	100	Indoor	Building/Basement
CRS5-TK16	MOT/GEN Lube system	1500	Indoor	Curbing
CRS5-TK23B	Stand 5 Roll Bend Oil Storage	500	Indoor	Mill floor/Building
eaner Line				
CLNM-GB01	Payoff Reel West		Indoor	Basement
CLNM-GB02	Payoff Reel East		Indoor	Basement
CLNM-GB03	Bridle Exit Roll		Indoor	Building

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment
leaner Line				
CLNM-GB04	Bridle Entry Roll		Indoor	Building
CLNM-GB05	Tension Reel		Indoor	Building
CLNM-TK08	Entry Hydraulic System		Indoor	Basement
CLNM-TK09	Exit Hydraulic system	1375	Indoor	Curbing
CLNM-TK10	Downender hydraulic system	130	Indoor	Building
oil Packaging				
CP-TK01	Hydraulic System	110	Indoor	Building
ombo Line				
RCCM-GB01A	Drag Bridle Gear Box #1	30	Indoor	Building/Basement
RCCM-GB02A	Drag Bridle Gear Box #2	30	Indoor	Building
RCCM-GB03A	Drag Bridle Gear Box #3		Indoor	Building
RCCM-GB04A	Pulling Corner Gear Box		Indoor	Building
RCCM-GB05A	Differential Gearbox 5A		Indoor	Building
RCCM-GB06A	Pulling Pinion Gearbox 6A		Indoor	Building/Basement
RCCM-GB07A	South Corner Gearbox 7A		Indoor	Building/Basement
RCCM-GB08	Main Pinch Roll Gear Box		Indoor	Basement

Appendix B-1 Page 8 of 15

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment
ombo Line				
RCCM-TK07	Shear Hydraulic System	170	Indoor	Building
RCCM-TK08	Welder Hydraulic Operating Tank	250	Indoor	Building/Basement
RCCM-TK09	Leveler Hydraulic Operating Tank	250	Indoor	Building/Basement
RCCM-TK10	Exit Askania Operations Tank	133	Indoor	Building
RCCM-TK11	Delivery end Hydraulic Operating Tank	945	Indoor	Basement
RCCM-TK12	Delivery End Hydraulic Operating Tank	445	Indoor	Basement
RCCM-TK13	Entry Askania Hydraulic operating tank	500	Indoor	Building/Basement
RCCM-TK14	Entry Hydraulic System Operating Tank	450	Indoor	Basement
ontinuous Anneal				
ANCA-GB01	Entry Looping Tower		Indoor	Basement
ANCA-GB02	Exit Looping Tower		Indoor	Basement
ANCA-GB03	#2 Tension Reel		Indoor	Basement
ANCA-GB04	#1 Tension Reel		Indoor	Basement
ANCA-GB05	#1 Bridle #1 Roll		Indoor	Building
ANCA-GB06	#1 Bridle #3 Roll		Indoor	Building/mill floor
ANCA-GB07	#2 Payoff Reel		Indoor	Basement

Appendix B-1 Page 9 of 15

Ref ID	Process Equipment	CAPACITY: gallons	Indoor Outdoor	Containment	
Continuous Anneal					
ANCA-GB08	#1 Payoff Reel		Indoor	Basement	
ANCA-GB09	#1Bridle#3Roll		Indoor	Building	
ANCA-TK05	Exit end Askania system	300	Indoor	Curbing	
ANCA-TK06	Exit end hydraulic system	300	Indoor	Curbing	
ANCA-TK08	Entry end hydraulic system	300	Indoor	Basement	
OCR Mill					
DCRM-GB01	Stand 1		Indoor	Basement	
DCRM-GB02	Stand 2		Indoor	Basement	
DCRM-GB03	Payoff Reel		Indoor	Basement	
DCRM-GB04	Tension Reel		Indoor	Basement	
DCRM-TK01	West Rolling Oil Solution Tank	5000	Indoor	Basement	
DCRM-TK02	East Rolling Oil Solution Tank	5000	Indoor	Basement	
DCRM-TK03A	Hydraulic Tank	800	Indoor	Basement	
DCRM-TK03B	Hydraulic Tank	500	Indoor	Basement	
DCRM-TK04	East Back Up Lube	12000	Indoor	Basement	
DCRM-TK05	West Back Up Lube	12000	Indoor	Basement	

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment
CR Mill				
DCRM-TK06	Main screwdown	300	Indoor	Basement
DCRM-TK07	Main drive lube	1000	Indoor	Basement
DCRM-TK08	MG lube set	50	Indoor	Basement
ckle Line				
PKLM-TK01	Entry Hydraulic System	1036	Indoor	Building/Basement
PKLM-TK02	Mandrel #1 Hydraulic system	450	Indoor	Building/Basement
PKLM-TK03	Mandrel #2 Hydraulic system	450	Indoor	Building/Basement
PKLM-TK04	Welder hydraulic system	600	Indoor	Building/Basement
PKLM-TK11	Steering Hydraulic system	200	Indoor	Building/Basement
PKLM-TK12	Temper Mill Hydraulic system	200	Indoor	Basement
PKLM-TK13	Temper Mill Gear Box Lube system	400	Indoor	Basement
PKLM-TK15	Entry Hydraulic Storage Tank #2	500	Indoor	Building
PKLM-TK16	Delivery End Hydraulic system	880	Indoor	Basement
PKLM-TK29	Entry Hydraulic Storage Tank #3	500	Indoor	Building
ecoil #1				
RCL1-GB01	Scrap Bailer		Indoor	Basement

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment	
ecoil #1					
RCL1-GB02	North Payoff reel		Indoor	Building	
RCL1-GB03	Tension Reel		Indoor	Basement	
RCL1-TK02	Hydraulic System	350	Indoor	Curbing	
RCL1-TK03	Askania System	350	Indoor	Curbing	
ecoil #2					
RCL2-GB01	North Payoff Reel		Indoor	Basement	
RCL2-GB02	Tension Reel		Indoor	Basement	
RCL2-TK02	Side Trimmer Lube system	125	Indoor	Basement	
RCL2-TK03	Askania	100	Indoor	Building	
RCL2-TK04	Hydraulic System #1	600	Indoor	Basement	
heet Temper Mill					
TMSM-TK12	Wet Roll Solution Storage Tank	4000	Indoor	Building	
TMSM-TK14	Storage Tank for Roll Balance	1200	Indoor	Basement	
TMSM-TK15	Coating Oil Tank	5000	Indoor	Basement	
TMSM-TK16A	Circulating System - north	1200	Indoor	Basement	
TMSM-TK16B	Circulating System - south	1200	Indoor	Basement	

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment
heet Temper Mill				
TMSM-TK17	Solution Tank	250	Indoor	Basement
TMSM-TK18A	Morgoil System- North	4000	Indoor	Basement
TMSM-TK18B	Morgoil System- South	4000	Indoor	Basement
TMSM-TK19	Wedge Drive Operating Tank	150	Indoor	Basement
TMSM-TK20	Cradle Car Hydraulic Operating Tank	960	Indoor	Basement
TMSM-TK21	Roll Bend Operating Tank	240	Indoor	Building
TMSM-TK22	Roll Balance Operating Tank	450	Indoor	Basement
in Free Steel				
ETCM-GB01	Entry Looping Tower		Indoor	Basement
ETCM-GB02	#1 Payoff Reel		Indoor	Building
ETCM-GB03	#2 Payoff Reel		Indoor	Building
ETCM-GB04	#1 Tension Reel		Indoor	Basement
ETCM-GB05	#2 Tension Reel		Indoor	Basement
ETCM-TK07	#2 Steering Roll West	35	Indoor	Drip Pan; Basement
ETCM-TK08	#2 Steering Roll East Tank	35	Indoor	Drip pan; Basement
ETCM-TK09	Entry Hydraulic System	500	Indoor	Basement

Ref ID	<b>Process Equipment</b>	CAPACITY: gallons	Indoor Outdoor	Containment	
in Free Steel					
ETCM-TK15	Exit Hydraulic System	500	Indoor	Basement	
ETCM-TK17	#1 Askania		Indoor	Basement	
ETCM-TK18	#2 Askania		Indoor	Basement	
ETCM-TK19	#3 Steering Roll Hydraulic System		Indoor	Building	
ETCM-TK20	#1 Entry Edge Control		Indoor	Building	
ETCM-TK21	#2 Entry Edge Control		Indoor	Basement	
ETCM-TK38	#1 Steering Hydraulic System		Indoor	Building	
in Line					
ETLM-GB01	Entry Looping Tower		Indoor	Basement	
ETLM-GB02	Tension Reel #1		Indoor	Basement	
ETLM-GB03	Tension Reel #2		Indoor	Basement	
ETLM-GB04	#1 Payoff reel		Indoor	Building	
ETLM-GB05	#2 Payoff Reel		Indoor	Building	
ETLM-GB06	Exit Looping Tower		Indoor	Basement	
ETLM-TK12	Entry Askania	200	Indoor	Basement	
ETLM-TK13	Entry Hydraulic System	400	Indoor	Basement	

Ref ID	Process Equipment	CAPACITY: gallons	Indoor Outdoor	Containment
Tin Line				
ETLM-TK17	Exit Askania	200	Indoor	Basement
ETLM-TK18	Exit Hydraulic system	400	Indoor	Basement

# **Midwest Plant SPCC Transformer Inventory**

Ref ID	Transformer	CAPACITY gallons	Indoor Outdoor	Containment
1001	TXFR-1001	950	INDOOR	Building
1002	TXFR-1002	700	INDOOR	Building
1061	TXFR-1061	950	INDOOR	Building
1062	TXFR-1062	950	INDOOR	Building
1063	TXFR-1063	950	INDOOR	Building
1064	TXFR-1064	1030	INDOOR	Building
1065	TXFR-1065	1065	INDOOR	Building
1066	TXFR-1066	700	INDOOR	Building
1067	TXFR-1067	500	INDOOR	Building
1A	TXFR-1A	4940	OUTDOOR	Concrete pad with curb
1B	TXFR-1B	4940	OUTDOOR	Concrete pad with curb
2A	TXFR-2A	5114	OUTDOOR	Concrete pad with curb
2B	TXFR-2B	5114	OUTDOOR	Concrete pad with curb
610	TXFR-610	120	INDOOR	Building

Appendix B-1 Page 1 of 7

Ref ID	Transformer	CAPACITY gallons	Indoor Outdoor	Containment
611	TXFR-611	120	INDOOR	Building
630	TXFR-630	450	INDOOR	Building
646	TXFR-646		INDOOR	Building
647	TXFR-647		OUTDOOR	Concrete pad
648	TXFR-648		OUTDOOR	Pole Mounted Transformer
650	TXFR-650		INDOOR	Building
694	TXFR-694		OUTDOOR	Pole Mounted Transformer
701	TXFR-701	1854	INDOOR	Building
702	TXFR-702	800	INDOOR	Building
703	TXFR-703	800	INDOOR	Building
704	TXFR-704	421	INDOOR	Building
705	TXFR-705		INDOOR	Building
706	TXFR-706	165	INDOOR	Building
710	TXFR-710	360	INDOOR	Building
711	TXFR-711	619	INDOOR	Building
712	TXFR-712	482	INDOOR	Building

Appendix B-1 Page 2 of 7

Ref ID	Transformer	CAPACITY gallons	Indoor Outdoor	Containment	
713	TXFR-713	360	INDOOR	Building	
714	TXFR-714	360	INDOOR	Building	
715	TXFR-715	478	INDOOR	Building	
716	TXFR-716	280	INDOOR	Building	
717	TXFR-717		INDOOR	Building	
718	TXFR-718		INDOOR	Building	
719	TXFR-719		INDOOR	Building	
720	TXFR-720	453	INDOOR	Building	
730	TXFR-730	478	INDOOR	Building	
731	TXFR-731	460	INDOOR	Building	
732	TXFR-732	450	INDOOR	Building	
733	TXFR-733	235	INDOOR	Building	
734	TXFR-734	280	INDOOR	Building	
735	TXFR-735	357	INDOOR	Building	
736	TXFR-736	250	INDOOR	Building	
738	TXFR-738	238	INDOOR	Building	

Appendix B-1 Page 3 of 7

Ref ID	Transformer	CAPACITY gallons	Indoor Outdoor	Containment	
740	TXFR-740	421	INDOOR	Building	
745	TXFR-745	360	INDOOR	Building	
746	TXFR-746	360	INDOOR	Building	
801	TXFR-801	421	INDOOR	Building	
802	TXFR-802	180	INDOOR	Building	
803	TXFR-803	790	INDOOR	Building	
804	TXFR-804	460	INDOOR	Building	
805	TXFR-805	460	INDOOR	Building	
806	TXFR-806	275	INDOOR	Building	
807	TXFR-807	275	INDOOR	Building	
808	TXFR-808	200	INDOOR	Building	
810	TXFR-810	1870	INDOOR	Building	
811	TXFR-811	790	INDOOR	Building	
812	TXFR-812	404	INDOOR	Building	
813	TXFR-813	404	INDOOR	Building	
814	TXFR-814	315	INDOOR	Building	

Appendix B-1 Page 4 of 7

Ref ID	Transformer	CAPACITY gallons	Indoor Outdoor	Containment	
815	TXFR-815	315	INDOOR	Building	
816	TXFR-816	530	INDOOR	Building	
817	TXFR-817	530	INDOOR	Building	
818	TXFR-818	530	INDOOR	Building	
819	TXFR-819	530	INDOOR	Building	
820	TXFR-820	208	INDOOR	Building	
825	TXFR-825		INDOOR	Building	
826	TXFR-826		INDOOR	Building	
827	TXFR-827	267	INDOOR	Building	
828	TXFR-828	267	INDOOR	Building	
829	TXFR-829	255	INDOOR	Building	
830	TXFR-830	225	INDOOR	Building	
831	TXFR-831		INDOOR	Building	
845	TXFR-845	357	INDOOR	Building	
846	TXFR-846	262	INDOOR	Building	
850	TXFR-850		INDOOR	Building	

Appendix B-1 Page 5 of 7

Ref ID	Transformer	CAPACITY gallons	Indoor Outdoor	Containment	
851	TXFR-851	425	INDOOR	Building	
852	TXFR-852	425	INDOOR	Building	
853	TXFR-853	425	INDOOR	Building	
854	TXFR-854	530	INDOOR	Building	
855	TXFR-855	250	INDOOR	Building	
901	TXFR-901	180	INDOOR	Building	
903	TXFR-903	180	INDOOR	Building	
904	TXFR-904	180	INDOOR	Building	
905	TXFR-905	180	INDOOR	Building	
906	TXFR-906	180	INDOOR	Building	
907	TXFR-907	180	INDOOR	Building	
908	TXFR-908	180	INDOOR	Building	
909	TXFR-909	180	INDOOR	Building	
910	TXFR-910	180	INDOOR	Building	
913	TXFR-913	200	INDOOR	Building	
914	TXFR-914	415	OUTDOOR	Concrete pad	

Appendix B-1 Page 6 of 7

Ref ID	Transformer	CAPACITY gallons	Indoor Outdoor	Containment	
915	TXFR-915	415	OUTDOOR	Concrete pad	
916	TXFR-916	415	OUTDOOR	Concrete pad	
929	TXFR-929		INDOOR	Building	
930	TXFR-930		INDOOR	Building	
931	TXFR-931	451	INDOOR	Building	
932	TXFR-932	449	INDOOR	Building	

## **APPENDIX B-2**

# **SWPPP INVENTORIES**

Potential SW Pollution Sources
Risk Assessment and Controls

# OUTFALL 002 DRAINAGE AREAS

				_		Outfall 002 Drainage Areas	1			
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Planned or Recommended Measures
Various within the	All 002 drainage areas	N/A	N/A	Outfall 002	Foam from various	Direct to Outfall	None, treatment of outfall	Procedure 70100036EMP Storm Water	Low	None
drainage area	rai ooz aramago aroad			Januar 302	sources	J. 1000 to Gallan	with antifoam as needed, see 70100036EMP.	Chemical at Midwest; routine visual observations during storm events by Test America.	2011	
oading/ unloading	GAL3-LD01	Sheet	3CL	O-8	Hydraulic oil	Leak/spill; Transfer operation	Building/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	GAL3-SA01	Sheet	3CL	0-11	Hydraulic oil	Leak/spill;Transfer operation;Overfill	Concrete walls	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	GAL3-SA02	Sheet	3CL	N-7	Lubrication	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	GAL3-TK09	Sheet	3CL	O-11	Hydraulic oil	Leak/spill;Transfer operation;Overfill	Built-in Rectangular dike	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	GAL3-TK10	Sheet	3CL	O-11	Hydraulic oil	Leak/spill;Valve(s);Transfer operation;Overfill	Built-in Rectangular dike	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	GAL3-TK21	Sheet	3CL	N-7	Lubrication	Leak/spill;Transfer operation;Overfill	Curbed steel pan	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	GAL3-TK22	Sheet	3CL	N-7	Lubrication	Leak/spill;Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	48GL-TK08	Sheet	48" Galv Line	F-29	Hydraulic oil	Transfer operation;Overfill	Pan	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Loading/ unloading	GACT-LD01	Sheet	72" Galv Line	E-27	Hydraulic oil	Transfer operation	Pit/tray	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	GACT-SA03	Sheet	72" Galv Line	E-27	Hydraulic oil	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	GACT-SA08	Sheet	72" Galv Line	F-5	Cleaning oil	Leak/spill;Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	GACT-SA10	Sheet	72" Galv Line	E-19	Lubrication	Leak/spill;Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	GACT-SA11	Sheet	72" Galv Line	F-37	Used oil	Leak/spill;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	GACT-TK03	Sheet	72" Galv Line	E-23	Hydraulic oil	Leak/spill;Valve(s);Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	GACT-TK04	Sheet	72" Galv Line	D-35	Lubrication	Leak/spill;Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None

Page 1 of 3 Outfall 002

	Outfall 002 Drainage Areas												
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Planned or Recommended Measures			
Tank	GACT-TK06	Sheet	72" Galv Line	G-125 relocated	EP Compound 320	Leak/spill;Valve(s);Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	GACT-TK07	Sheet	72" Galv Line	E-27	Hydraulic oil	Leak/spill;Overfill	Concrete dike	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	GACT-TK08	Sheet	72" Galv Line	E-27	Lubrication	Leak/spill;Overfill	Berm	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	GACT-TK09	Sheet	72" Galv Line	E-27	Lubrication	Leak/spill;Valve(s);Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	GACT-TK10	Sheet	72" Galv Line	E-27	Hydraulic oil	Leak/spill;Valve(s);Overfill	Berm	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	GACT-TK11	Sheet	72" Galv Line	E-27	Coating oil	Valve(s);Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	GACT-TK13	Sheet	72" Galv Line	F-35	Solvent Cleaner	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Storage area	RCCM-SA01	Sheet	Combo Line	L-47	Hydraulic oil	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Storage area	RCCM-SA04	Sheet	Combo Line	L-37	Various Oils	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Storage area	RCCM-SA05	Sheet	Combo Line	L-31	Various Oils	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	RCCM-TK01	Sheet	Combo Line	L-37	Cleaning oil	Leak/spill;Transfer operation;Overfill	Building/Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	RCCM-TK02	Sheet	Combo Line	L-37	Hydraulic oil	Leak/spill;Transfer operation	Building/Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	RCCM-TK03	Sheet	Combo Line	L-37	Hydraulic oil	Manhole;Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	RCCM-TK04	Sheet	Combo Line	L-27	Hydraulic oil	Leak/spill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	RCCM-TK05A	Sheet	Combo Line	L-31	Lubrication	Leak/spill	Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Tank	RCCM-TK05B	Sheet	Combo Line	L-31	Hydraulic oil	Leak/spill	Building/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			

Page 2 of 3 Outfall 002

						Outfall 002 Drainage Areas				
A still it as O source	Source ID/ Common	Di.	Down	1 4!	Significant Material(s)	F Mathad/Dath	Others town I Country I	Non-Otherstern Countries (DMD-	Storm Water	Planned or Recommended
Activity or Source Fank	Name RCCM-TK05C	<b>Div</b> Sheet	Dept Combo Line	L-31	/Pollutants Coating oil	Exposure Method/Pathway Leak/spill	Structural Controls Building/mill floor	Non-Structural Controls / BMPs -Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Risk Level Low	Measures None
ank	RCCM-TK06A	Sheet	Combo Line	L-31	Coating oil	Valve(s);Manhole;Transfer operation;Overfill	Building/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
ank	RCCM-TK06B	Sheet	Combo Line	L-31	Coating oil	Leak/spill;Manhole;Overfill	Building/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
ank	RCCM-TK06C	Sheet	Combo Line	L-31	Coating oil	Leak/spill;Manhole;Transfer operation;Overfill	Building/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
otential spills and eaks from delivery ucks	Manhole at Intersection of South and West Roads	MWP	MWP	C-3	oils, fuels, delivered chemicals	leaks/spills have potential to impact 002 storm sewer directly via an open grate manhole on roadway	None feasible	-Quarterly Inspections -Posted warning sign/procedure -Spill Kit near area	Medium	None
otential spills and aks from delivery ucks	Manholes at South end of south warehouses (3)	MWP	MWP	E5, E/F-5, F5	oils, fuels, delivered chemicals	leaks/spills have potential to impact 002 storm sewer directly via 3 open grate manholes	Jersey barriers	-Quarterly Inspections -Posted warning sign/procedure -Spill Kit near area	Low	None
otential spills and eaks from employee ehicles	AE-1 Employee Parking Lot Manholes	Security/HR	Security/HR	Parking area west side of AE-1	oils, fuels	leaks/spills have potential to impact 002 storm sewer directly via open grate manholes	Jersey barriers	-Quarterly Inspections -Posted warning sign/procedure -Spill Kit near area	Low	None
oading/ unloading	Sodium Bisulfite Loading Station	Op Services	Utilities	B-17	Sodium Bisulfite	Transfer operation, overfill	Building	Spill Kits	Low	None
acker Box	Scale	Security/HR	Security/HR	Scale House	Waste	Pickup, Overfill	None	Waste Management	Low	None
0 yard rolloff	3CL, Door 34	Sheet	3CL	P-21	Waste	Pickup, Overfill	None	Waste Management	Low	None
Packer Box	Track Shack, SW	Op Services	Utilities	W-30	Waste	Pickup, Overfill	None	Waste Management	Low	None
acker Box	AE-1 Parking Lot, West	Op Services	Transportation	Q-4	Waste	Pickup, Overfill	None	Waste Management	Low	None
0 yard rolloff	Warehouse #54, Door 18	Sheet	CR Shipping STM	L-12	Waste	Pickup, Overfill	None	Waste Management	Low	None
0 yard rolloff	Batch Anneal, Door 15	Tin	Batch Anneal	H-12	Waste	Pickup, Overfill	None	Waste Management	Low	None
acker Box	Central Receiving	Security/HR	Security/HR	B-23	Waste	Pickup, Overfill	None	Waste Management	Low	None
acker Box	72" Parking	Sheet	72" Galv Line	C-29	Waste	Pickup, Overfill	None	Waste Management	Low	None
acker Box	3CL, SE	Sheet	3CL	N-3	Waste	Pickup, Overfill	None	Waste Management	Low	None
0 yard Rolloff	3CL, SE	Sheet	3CL	N-3	Metal Scrap	Pickup, Overfill	None	Waste Management	Low	None
Packer Box	Walk-in Gate	Security/HR	Security/HR	D-60	Waste	Pickup, Overfill	None	Waste Management	Low	None
Packer Box	Employee Parking Lot (Main)	Security/HR	Security/HR	B-37	Waste	Pickup, Overfill	None	Waste Management	Low	None
20 yard rolloff (x2)	Roll Shop Road	Tin	Roll Shop	G-20	Metal Scrap	Pickup, Overfill	None	Waste Management	Low	None
oading/ unloading	Waste Zinc Phosphate/ ChemTreat	Sheet	72" Galv Line	E-28	Waste Zince Phos/ ChemTreat	Transfer operation	Building, Containment	Spill Kit, Trained personnel	Low	None

Revision Date: 10/03/2018

Outdoor transformers are inspected quarterly under 40 CFR 761 requirements. Refer to PCB Program for details. None pose a direct risk to storm waters.

All storage tanks and transfer areas are inspected quarterly under the 40 CFR 112 requirements. Refer to SPCC Program for details. None pose a direct risk to storm water.

Page 3 of 3 Outfall 002

# OUTFALL 003 DRAINAGE AREAS

						Outfall 003 Drainage Areas				
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Planned or Recommended Measures
Various within the drainage area	All 003 drainage areas	N/A	N/A	Outfall 003	Foam from various sources	Direct to Outfall	None, treatment of outfall with antifoam as needed, see 70100036EMP.		Low	None
Storage area	TS-SA01	Op Services	Transportation	H-89	Various Oils	Transfer operation	Pan	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	TS-SA02	Op Services	Transportation	H-89	Various Oils	Lead/spill; Transfer operation	Pan	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TS-TK01	Op Services	Transportation	H-89	Hydraulic oil	Leak/spill;Valve(s);Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	AC-TK01	Op Services	Utilities	D-65	Hydraulic oil	Transfer operation	Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Negligible (local drainage)	None
Tank	AC-TK02	Op Services	Utilities	D-65	Hydraulic oil	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	FTSD-SA01	Op Services	Utilities	Sludge Dewatering	Hydraulic oil	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	GACT-TK01	Sheet	72" Galv Line	E-61	Hydraulic oil	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	GACT-TK02	Sheet	72" Galv Line	E-61	Hydraulic oil	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Loading/ unloading	CRS5-LD01	Sheet	80" 5-Stand	K-69	Lubrication	Leak/spill	Mill floor/Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	CRS5-SA03	Sheet	80" 5-Stand	H-77	Hydraulic oil	Leak/spill;Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CRS5-TK14A	Sheet	80" 5-Stand	K-77	Rolling oil	Leak/spill;Valve(s)	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CRS5-TK14B	Sheet	80" 5-Stand	K-77	Cleaning oil	Leak/spill;Valve(s);Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CRS5-TK19	Sheet	80" 5-Stand	K-69	Lubrication	Leak/spill;Transfer operation;Overfill	Building/Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CRS5-TK24	Sheet	80" 5-Stand	K-69	Hydraulic oil	Leak/spill;Valve(s);Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None

Page 1 of 5 Outfall 003

		Outfall 003 Drainage Areas											
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Planned or Recommended Measures			
ank	CRS5-TK21	Sheet	80" 5-Stand	K-69	Hydraulic oil	Leak/spill; Transfer operation	Building/Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
ank	CRS5-TK22	Sheet	80" 5-Stand	K-69	Lubrication	Leak/spill;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
ank	CRS5-TK23A	Sheet	80" 5-Stand	I-69	Hydraulic oil	Leak/spill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
ank	CRS5-TK23B	Sheet	80" 5-Stand	I-69	Hydraulic oil	Leak/spill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
oading/ unloading	PKLM-LD01	Sheet	Pickle Line	M-73	Coating Oil	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
itorage area	PKLM-SA04	Sheet	Pickle Line	N-99	Hydraulic oil	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
torage area	PKLM-SA08	Sheet	Pickle Line	L-85	Hydraulic oil	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Storage area	PKLM-SA09	Sheet	Pickle Line	L-73	Lubrication	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Storage area	PKLM-SA11	Sheet	Pickle Line	L-73	Hydraulic oil	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
Storage area	PKLM-SA13	Sheet	Pickle Line	M-80	Various Oils, Kerosene	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
<sup>-</sup> ank	PKLM-TK20	Sheet	Pickle Line	M-71	Hydraulic oil	Leak/spill;Valve(s);Transfer operation;Overfill	Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
ank	PKLM-TK21	Sheet	Pickle Line	M-71	Hydraulic oil	Leak/spill;Valve(s);Transfer operation;Overfill	Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
ank	PKLM-TK27	Sheet	Pickle Line	M-71	Coating oil	Manhole;Transfer operation;Overfill	Basement; Concrete pad diverts into DIW	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
oading/ unloading	TMSM-LD01	Sheet	Sheet Temper Mill	L-49	Hydraulic oil	Transfer operation	Concrete dike	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			
oading/ unloading	TMSM-LD02	Sheet	Sheet Temper Mill	K-53	Hydraulic oil	Leak/spill;Valve(s);Transfer operation	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None			

Page 2 of 5 Outfall 003

						Outfall 003 Drainage Areas				
A - 4 livite O	Source ID/ Common	Div	Point	Location	Significant Material(s)	F Math. J/Dath	Structural Controls	Non-Structural Controls / BMPs	Storm Water	Planned or Recommended
Activity or Source	Name TMSM-SA01	Sheet	Dept Sheet Temper	J-49	/Pollutants Coating oil	Exposure Method/Pathway	Pan Structural Controls	-Quarterly Inspections		Measures
Storage area		Sneet	Mill		Coating oil	Leak/spill; Transfer operation	Pan	-Quarterly inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	TMSM-SA02	Sheet	Sheet Temper Mill	K-47	Various Oils	Leak/spill; Transfer operation	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	TMSM-SA03	Sheet	Sheet Temper Mill	L-43	Used Oil	Leak/spill; Transfer operation	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMSM-TK03	Sheet	Sheet Temper Mill	J-49	Hydraulic oil	Transfer operation;Overfill;N/A	Building/Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMSM-TK04	Sheet	Sheet Temper Mill	J-49	Hydraulic oil	Leak/spill;Valve(s);Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMSM-TK05	Sheet	Sheet Temper Mill	J-47	Coating oil	Leak/spill;Valve(s);Transfer operation;Overfill	Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMSM-TK07	Sheet	Sheet Temper Mill	J-47	Hydraulic oil	Leak/spill;Valve(s);Transfer operation;Overfill	Building/Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMSM-TK08	Sheet	Sheet Temper Mill	J-47	Hydraulic oil	Transfer operation;Overfill	Concrete dike	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMSM-TK09	Sheet	Sheet Temper Mill	K-45	Rolling oil	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMSM-TK10	Sheet	Sheet Temper Mill	K-45	Coating oil	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMSM-TK11	Sheet	Sheet Temper Mill	K-45	Lubrication	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMSM-TK12	Sheet	Sheet Temper Mill	L-47	Hydraulic oil	Valve(s);Manhole;Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMSM-TK13	Sheet	Sheet Temper Mill	H-45	Hydraulic oil	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Loading/ unloading	CRT5-LD01	Tin	52" 5-Stand	K-85	Hydraulic oil	Leak/spill;Transfer operation	Concrete dike	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	CRT5-SA03	Tin	52" 5-Stand	L-85	Hydraulic oil	Transfer operation	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None

Page 3 of 5 Outfall 003

					1 6: ::: .	Outfall 003 Drainage Areas		_		
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Planned or Recommended Measures
Tank	CRT5-TK10	Tin	52" 5-Stand	K-83	Hydraulic oil	Leak/spill;Valve(s);Transfer operation;Overfill	Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CRT5-TK15A	Tin	52" 5-Stand	K-81	Hydraulic oil	Leak/spill;Valve(s);Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CRT5-TK15B	Tin	52" 5-Stand	K-81	Hydraulic oil	Leak/spill;Valve(s);Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CP-TK02	Tin	Chrome Line	E-85	Hydraulic oil	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	ETCM-SA05	Tin	Chrome Line	E-95	Various Oils	Transfer operation	Pan	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CLNM-TK01	Tin	Cleaner Line	G-81	Hydraulic oil	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CLNM-TK03	Tin	Cleaner Line	G-73	Hydraulic oil	Leak/spill;Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CLNM-TK04	Tin	Cleaner Line	G-69	Lubrication	Leak/spill;Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CLNM-TK05	Tin	Cleaner Line	G-69	Lubrication	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	RS-SA01	Tin	Roll Shop	F-73	Hydraulic oil	Leak/spill;Transfer operation;Overfill	Building contains	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	RS-SA02	Tin	Roll Shop	F-79	Hydraulic oil	Manhole;Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	RS-SA03	Tin	Roll Shop	F-87	Used Oil	Leak/spill; Transfer operation	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	RS-SA05	Tin	Roll Shop	G-93	Hydraulic oil	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	RS-TK02	Tin	Roll Shop	F-79	Hydraulic oil	Leak/spill;Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	RS-TK04	Tin	Roll Shop	F-79	Lubrication	Leak/spill;Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None

Page 4 of 5 Outfall 003

						Outfall 003 Drainage Areas				
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Planned or Recommended Measures
Tank	RS-TK05	Tin	Roll Shop	F-87	Hydraulic oil	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Negligible (in containment)	None
Potential spills and leaks from employee vehicles	Employee Parking Lot Manholes	Security/HR	Security/HR	West side Employee parking lot	oils, fuels, delivered chemicals	leaks/spills have potential to impact 003 storm sewer directly via open grate manholes	Jersey barriers around manholes	-Quarterly Inspections -Posted warning sign/procedure -Spill Kit near area	Low	None
Potential spills and leaks from employee vehicles	Security Bldg Area Manholes Along Roadway		Security	West road E. of Security Bldg.	oils, fuels, garage chemicals	leaks/spills and runoff from garage activities have potential to impact 003 storm sewer directly via open grate manholes	None feasible	-Quarterly Inspections -Posted warning sign/procedure prohibiting vehicle washing -Spill Kit near area	Low	None
Barrel Pad	Barrel Pad	Op Services	Utilities	K-L 85-90	Oil, Grease, Particulates	Leak/spill; Transfer operation	DIW sewers drain to treatment plant	loading/unloading procedures	Low	None
Storage Area	AMROX	Contractor	AMROX	P-75	Particulates, acid	Leak/spill; Transfer operation; Overfill	Fence, Paved Surfaces, Buildings	None	Low	None
Packer Box	Contractor Gate	N/A	N/A	B-85	Waste	Pickup, Overfill	None	Waste Management	Low	None
Loading/ unloading zone	Employee Parking Lot	N/A	N/A	B-63	Sodium Bisulfite	Transfer Operations	Building, Jersey Barriers	Spill Kits	Low	None
	Roll Shop Dust Collector, Door 14	Tin	Roll Shop	F-64	Particulates, metal	Pickup, Overfill	Contained in Rolloff	procedures	Low	None
20 yard rolloff	Roll Shop, Door 14	Tin	Roll Shop	G-64	Waste	Pickup, Overfill	None	Waste Management	Low	None
20 yard rolloff (1-5)	Coil Pad Road	Op Services	Transportation	S-42	Metal Scrap	Pickup, Overfill	Storage of empty rolloffs or unidentified waste	Waste Management	Low	None
Packer Box	Material Control, NW	Op Services	Transportation	M-56	Waste	Pickup, Overfill	None	Waste Management	Low	None
Packer Box	HNX Building, Door 35	Op Services	Transportation	K-53	Waste	Pickup, Overfill	None	Waste Management	Low	None
20 yard rolloff	Pickle Line, Door 37	Sheet	Pickle Line	L-64	Waste	Pickup, Overfill	None	Waste Management	Low	None
20 yard rolloff	Pickle Line, Door 38	Sheet	Pickle Line	L-64	Metal Scrap	Pickup, Overfill	None	Waste Management	Low	None

Revision Date: 10/03/2018

Outdoor transformers are inspected quarterly under 40 CFR 761 requirements. Refer to PCB Program for details. None pose a direct risk to storm waters.

All storage tanks and transfer areas are inspected quarterly under the 40 CFR 112 requirements. Refer to SPCC Program for details. None pose a direct risk to storm water.

Page 5 of 5 Outfall 003

# OUTFALL 104 & 004 DRAINAGE AREAS

					Outra	II 104 & 004 Drainage Area	5 	1		Planned or
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Recommended Measures
arious within the	All 004 drainage areas		N/A	Outfall 004	Foam from various sources	Direct to Outfall	None, treatment of outfall	Procedure 70100036EMP Storm Water	Low	None
rainage area							with antifoam as needed, see 70100036EMP.	Chemical at Midwest; routine visual observations during storm events by Test America.		
ank	CONT-AMS-TK01	Op Services	Transportation	SW of Transportation Garage	Diesel	Transfer operation	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
ank	CONT-AMS-TK02	Op Services	Transportation	SW of Transportation Garage	Diesel	Transfer operation	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
<b>Tank</b>	CONT-KM-TK03	Op Services	Transportation	SW of Transportation Garage	Diesel	Transfer operation	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
ank	CONT-KM-TK04	Op Services	Transportation	SW of Transportation Garage	Diesel	Transfer operation	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	TRANS-SA01	Op Services	Transportation	SE Corner of Transportation Garage	Used oil	Transfer operation	Berm	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TRANS-TK01	Op Services	Transportation	SE Corner of Transportation Garage	Fuel	Leak/spill;Valve(s);Transfer operation	Curbing	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TRANS-TK02	Op Services	Transportation	SE Corner of Transportation Garage	Lubrication	Leak/spill;Transfer operation;Overfill	curbing	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TRANS-TK03	Op Services	Transportation	SE Corner of Transportation Garage	Hydraulic oil	Leak/spill;Transfer operation;Overfill	Curbing	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TRANS-TK04	Op Services	Transportation	SE Corner of Transportation Garage	Hydraulic oil	Leak/spill;Transfer operation	Curbing	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TRANS-TK05	Op Services	Transportation	SE Corner of Transportation Garage	Transmission Fluid	Leak/spill	Curbing	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TRANS-TK06	Op Services	Transportation	SW of Transportation Garage	Diesel	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TRANS-TK08	Op Services	Transportation	SW of Transportation Garage	Gasoline	Transfer operation;Overfill	Concrete dike	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TRANS-TK09	Op Services	Transportation	SW of Transportation Garage	Biodiesel	Leak/spill	Concrete dike	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TRANS-TK11	Op Services	Transportation	SW of Transportation Garage	Used oil	Leak/spill;Transfer operation;Overfill	Concrete dike	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None

Page 1 of 5 Outfall 104 and 004

					Outfa	all 104 & 004 Drainage Area	s				
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Planned or Recommended Measures	
Storage area	CM-SA01	Op Services	Utilities	H-111	Various Oils	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Storage area	CM-SA02	Op Services	Utilities	H-117	Various Oils	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Storage area	CM-SA03	Op Services	Utilities	H-121	Various Oils	Leak/spill	Pit/tray	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Tank	FP-TK01	Op Services	Utilities	K-85	Fuel	Leak/spill;Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Tank	FP-TK02	Op Services	Utilities	K-85	Fuel	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Storage area	FTS-SA01	Op Services	Utilities	N of Clarifier	Gear Oil	Transfer operation;Overfill	Pan	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Storage area	PWWT-SA02	Op Services	Utilities	K-139	Hydraulic oil	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Storage area	ULPH-SA01 (UTPH-SA01?)	Op Services	Utilities	Lake Pumphouse	Various Oils	Leak/spill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training -Signage posted prohibiting chemicals/oils inside pumphouse	High	None	
Storage area	PKLM-SA12	Sheet	Pickle Line	P-103	Various Oils, Kerosene	Leak/spill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Loading/ unloading	PKLM-LD02	Sheet	Pickle Line	M-103	Hydraulic oil	Leak/spill;Transfer operation	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Loading/ unloading	PKLM-LD04	Sheet	Pickle Line	L-115	Hydraulic oil	Transfer operation	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Tank	PKLM-TK14, TK15, TK29, TK30	Sheet	Pickle Line	N-109	Hydraulic oil	Leak/spill;Manhole;Transf er operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Tank	PKLM-TK31	Sheet	Pickle Line	M-111	Hydraulic oil	Leak/spill	Building; storm sewer manhole is sealed	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Tank	PKLM-TK32	Sheet	Pickle Line	M-105	Hydraulic oil	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	
Storage area	TFG-SA01	Tin		E-113	Hydraulic oil	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None	

Page 2 of 5 Outfall 104 and 004

					Outfa	III 104 & 004 Drainage Area	S			Planned or
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Recommended Measures
Storage area	ETCM-SA09	Tin	Chrome Line	D-93	Hydraulic oil	Transfer operation;Overfill		-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ETCM-TK02	Tin	Chrome Line	E-105	Hydraulic oil	Transfer operation;Overfill	Portable containment; Building/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ETCM-TK05	Tin	Chrome Line	E-91	Hydraulic oil	Leak/spill;Transfer operation;Overfill	Drip pan; Basement/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ETCM-TK22	Tin	Chrome Line	E-95	Used oil	Leak/spill;Transfer operation;Overfill	Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	ANCA-SA03	Tin	Continuous Anneal	G-119	Hydraulic oil	Transfer operation;Overfill	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ANCA-TK01	Tin	Continuous Anneal	G-101	Hydraulic oil	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ANCA-TK04	Tin	Continuous Anneal	G-119	Hydraulic Oil	Transfer operation;Overfill	Catch Basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	DCRM-SA01	Tin	DCR Mill	F-131	Lubrication	Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	DCRM-SA05	Tin	DCR Mill	G-123	Lubrication	Leak/spill;Overfill	Building/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	DCRM-TK09A, TK09B, TK09C	Tin	DCR Mill	F-125	Hydraulic oil	Transfer operation;Overfill	Portable Containment/Building/Mill Floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	DCRM-TK10	Tin	DCR Mill	F-125	Hydraulic oil	Leak/spill;Valve(s);Transfer operation	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	DCRM-TK11A, TK11B	Tin	DCR Mill	F-129	Rolling oil	Leak/spill;Valve(s);Transfer operation;Overfill	Pit/tray	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	DCRM-TK13	Tin	DCR Mill	G-125	Hydraulic oil	Leak/spill;Transfer operation;Overfill	Building/Basement	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	RCL2-SA02	Tin	Recoil #2	E-132	Lubrication	Leak/spill;Valve(s);Transfer operation;Overfill	Portable Containment/Building/Mill Floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	RCL2-SA03	Tin	Recoil #3	E-127	Various Oils		Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None

Page 3 of 5 Outfall 104 and 004

					Outia	all 104 & 004 Drainage Area	) 			Planned or
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Recommended Measures
Tank	RCL2-TK01	Tin	Recoil #4	E-129	Hydraulic oil	Leak/spill;Valve(s);Transfer operation		-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	ETLM-SA02	Tin	Tin Line	F-87	Coating oil	Leak/spill;Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ETLM-TK01	Tin	Tin Line	F-113	Hydraulic oil	Leak/spill;Valve(s);Transfe r operation;Overfill	Building/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ETLM-TK02	Tin	Tin Line	F-113	Hydraulic oil		Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ETLM-TK09	Tin	Tin Line	F-87	Hydraulic oil	Leak/spill;Transfer operation;Overfill	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ETLM-TK10	Tin	Tin Line	F-87	Hydraulic oil	Transfer operation;Overfill	Building/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ETLM-TK11	Tin	Tin Line	F-87	Hydraulic oil	Transfer operation;Overfill	Portable containment	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	ТМТМ-ТК07	Tin	Tin Temper Mill	F-133	Hydraulic oil	Overfill	Pit/tray	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMTM-TK08	Tin	Tin Temper Mill	G-133	Hydraulic oil	Transfer operation;Overfill	Portable Containment/Building/Mill Floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	TMTM-TK09	Tin	Tin Temper Mill	G-135	Lubrication	Transfer operation;Overfill	Building/mill floor	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	TMTM-SA02	Tin	Tin Temper Mill	F-137	Various Oils & Grease	Leak/spill; Transfer operation	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	TMTM-SA03	Tin	Tin Temper Mill	F-137	Various Oils & Grease	Leak/spill; Transfer operation	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Storage area	TMTM-SA01	Tin	Tin Temper Mill	G-137	Various Oils & Grease	Leak/spill; Transfer operation	Building	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Tank	CONT-ST-TK05 (formerly STC-TK01)	Op Services	Transportation	North of Delray Building	Diesel	Transfer operation	Catch basin	-Quarterly Inspections -Loading/unloading procedures -Spill prevention training -Storm water pollution prevention training	Low	None
Potential spills and leaks from delivery trucks	TMP Parking Lot Manhole	Tin	Tin Mill	TMP Parking Lot	oils, fuels, delivered chemicals	leaks/spills have potential to impact 004 storm sewer directly via open grate manhole	None feasible	-Quarterly Inspections -Posted warning sign/procedure -Spill Kit near area	Low	None

Page 4 of 5 Outfall 104 and 004

Outfall 104 & 004 Drainage Areas										
Activity or Source	Source ID/ Common Name	Div	Dept	Location	Significant Material(s) /Pollutants	Exposure Method/Pathway	Structural Controls	Non-Structural Controls / BMPs	Storm Water Risk Level	Planned or Recommended Measures
Potential spills and leaks from delivery trucks	Manhole CB1 in Final Treatment Area	Utilities	Utilities	Final Treat	oils, fuels, delivered chemicals	leaks/spills have potential to impact 004 storm sewer directly via open grate manhole	None feasible	-Quarterly Inspections -Posted warning sign/procedure -Spill Kit near area	Low	None
Potential spills and leaks from vehicles	Manholes along Portside Facility roadway	MWP	MWP	Portside Energy	oils, fuels, delivered chemicals	leaks/spills have potential to impact 004 storm sewer directly via open grate manhole	None feasible	-Quarterly Inspections -Posted warning sign/procedure -Spill Kit near area	Low	None
Loading/ unloading	Final Treat (North)	Op Services	Utilities	Final Treat	Lime Slurry	Transfer operation;Overfill	Containment	Loading/unloading procedures	Low	None
Loading/ unloading	Final Treat (North)	Op Services	Utilities	Final Treat	ChemTreat Chemicals	Transfer operation;Overfill	Containment	Loading/unloading procedures	Low	None
Loading/ unloading	Final Treat (North)	Op Services	Utilities	Final Treat	Sulfuric Acid	Transfer operation;Overfill	Containment	Loading/unloading procedures	Low	None
_oading/ unloading zone	Lake Pumphouse	Op Services	Utilities	Lake Pumphouse	Sodium Hypochlorite	Transfer operation;Overfill	Building, Berm to north	Loading/unloading procedures	Low	None
Loading/ unloading zone	Sludge Dewatering	Op Services	Utilities	Sludge Dewatering	Lime Slurry	Transfer operation;Overfill	Proximity to sewers, Grassy area	Loading/unloading procedures	Low	None
Loading/ unloading zone	Sludge Dewatering	Op Services	Utilities	Sludge Dewatering	MgOH	Transfer operation;Overfill	Proximity to sewers, Grassy area	Loading/unloading procedures	Low	None
Heavy Equipment Parking and Repair	Transportation Garage	Op Services	Transportation	Transportation	Oil, Grease, particulates, Gasoline, kerosene, diesel	Leak/ spill, overfill	Building	None	Low	None
Sawdust	Carpenter Shop	Op Services	Utilities	Carpenter Shop	Particulates	Wind, Spill	Building	None	Low	None
Packer Box	UT-11, North End	Op Services	Utilities	UT-11	Waste	Pickup, Overfill	None	Waste Management	Low	None
Packer Box	Final Treat North	Op Services	Utilities	Final Treat	Waste	Pickup, Overfill	None	Waste Management	Low	None
Packer Box	TMP Parking Lot	Tin	Parking Lot	TMP Parking Lot	Waste	Pickup, Overfill	None	Waste Management	Low	None
Packer Box	Boiler House, North Door	Op Services	Utilities	Boiler House	Waste	Pickup, Overfill	None	Waste Management	Low	None
Packer Box	Final Treat South	Op Services	Utilities	Final Treat	Waste	Pickup, Overfill	None	Waste Management	Low	None
Packer Box	AE-8, NW End	Op Services	Utilities	AE-8	Waste	Pickup, Overfill	None	Waste Management	Low	None
Sludge Filter Cakes (Haz Waste)	Greenbelt II Landfill	N/A	Environmental	Greenbelt II Landfill	Oil, Grease, Metals, particulates	Leak/spill, transfer operations	Isolated Drainage Area, Storm Water Accumulation is pumped to Final Treat	Weekly Inspections	Low	None
Sludge Filter Cakes (Haz Waste)	Greenbelt I Landfill	N/A	N/A	Greenbelt I Landfill	Oil, Grease, Metals, particulates	None, Landfill no longer in use	Landfill closed and capped, belongs to National Steel Trust	Inspections	Low	None
Unknown buried waste	Eastside SWMU	N/A	Environmental	Eastside SWMU	Oil, Grease, Metals, particulates	None, Area closed	Area closed and capped	Inspections	Low	None
Assorted Hazardous Waste	PCB Shed	N/A	Environmental	W-33	Mercury, Chrome, Acid, Aerosols	Transfer operations	Building and berms	Weekly Inspections	Low	None
Oily Waste Pad	Oily Waste Pad	Contractor	K&M	Y-10	Oil, Grease, Particulates	Transfer operations	Berms	loading/unloading procedures, solidified and transported to landfill on a regular basis	Low	None
750,000 Gallon Tank	West of GBII	Op Services	Utilities	XY-4	Storm Water, GB II Leachate	Overfill	Secondary Containment	None	Low	None
20 yard rolloff	Road to Landfill, Across from OWP			X-6	Waste	Pickup, Overfill	None	Waste Management	Low	None
20 yard rolloff	Final Treat	Op Services	Utilities	Final Treat	Waste	Pickup, Overfill	None	Waste Management	Low	None
1000000 Gallon Tank	Final Treat (South)	Op Services	Utilities	Final Treat	NA	NA	Not in use	None	Low	None
Loading/ unloading	Pretreat	Op Services	Utilities	Pretreat	Sodium Bisulfite	Transfer Operations	Isolated Drainage Area	Loading/unloading procedures	Low	None
Loading/ unloading	Pretreat	Op Services	Utilities	Pretreat	Caustic	Transfer Operations	Isolated Drainage Area	Loading/unloading procedures	Low	None
Loading/ unloading	Pretreat	Op Services	Utilities	Pretreat	Sodium Bisulfite	Transfer Operations	Isolated Drainage Area	Loading/unloading procedures	Low	None
Loading/ unloading	Pretreat	Op Services	Utilities	Pretreat	ChemTreat Chemicals (2)	Transfer Operations	Isolated Drainage Area	Loading/unloading procedures	Low	None
Loading/ unloading	API/ Oil Intercepter	Op Services	Utilities	J-138	Chemtreat P841L, P817E	Transfer operations	Isolated Drainage Area	Loading/unloading procedures	None	None

Revision Date: 10/03/2018

Outdoor transformers are inspected quarterly under 40 CFR 761 requirements. Refer to PCB Program for details. None pose a direct risk to storm waters.

All storage tanks and transfer areas are inspected quarterly under the 40 CFR 112 requirements. Refer to SPCC Program for details. None pose a direct risk to storm water.

Page 5 of 5 Outfall 104 and 004

# **APPENDIX C**

# SWPPP Team Members Notification Lists

### **Storm Water Pollution Prevention Team**

Area	Operating/Maintenance Area Personnel & Responsibility	Environmental Control Personnel & Responsibility
Plant SWPPP	Midwest Plant Area Manager -	Midwest Plant Env Compliance Manager -
Administrator and	Plan implementation,	Plan development, compliance and
Responsible Mgmt	maintenance, compliance,	implementation
	resources and training	
Landfill	Utilities and Environmental	Midwest Plant Env Compliance Manager -
	Control personnel -	Compliance and implementation
	Compliance and	
	implementation, training	
Repair Shops and	Division Manager or Designee -	Midwest Plant Env Compliance Manager -
Garages	Compliance and	Compliance and implementation
	implementation, training	
Contractors	Onsite Contractor Facilities -	Midwest Plant Env Compliance Manager -
	Develop plans, compliance and	Compliance and implementation
	implementation, training	
Pickle Line	Division Manager or Designee -	Midwest Plant Env Compliance Manager -
	Compliance and	Compliance and implementation
	implementation, training	
Sheet Production	Division Manager or Designee -	Midwest Plant Env Compliance Manager -
Areas	Compliance and	Compliance and implementation
	implementation, training	
Tin and Chrome	Division Manager or Designee -	Midwest Plant Env Compliance Manager -
Production Areas	Compliance and	Compliance and implementation
	implementation, training	
WWT Facilities	Division Manager or Designee -	Midwest Plant Env Compliance Manager -
	Compliance and	Compliance and implementation
	implementation, training	
Utilities	Division Manager or Designee -	Midwest Plant Env Compliance Manager -
	Compliance and	Compliance and implementation
	implementation, training	
Contractor-ST	ST Environmental Personnel -	Midwest Plant Env Compliance Manager -
Environmental	Quarterly SWPPP inspections,	Quarterly inspections, plan development
	plan development and	and maintenance
	maintenance	

Page 1 of 3 Rev Date: 04 October 2018

### **Facility Emergency Contacts**

ORGANIZATION/CONTACT	PLANT PHONE
	(OR 219-763-XXXX)
Energy Load Dispatcher (LD)	5151
Plant Security	5911
Plant Safety	5376
Industrial Hygiene	5376
Emergency Responders	
Fire Department	5911
Ambulance	5911
<b>Environmental Emergency Coordinators</b>	
Environmental Compliance Manager – Midwest	5869
On-Duty Environmental Manager	Contact LD

### **Federal and State Agency Notifications**

AGENCY / EMERGENCY PERSONNEL	PHONE NUMBER	AUTHORIZED TO CALL
National Response Center (NRC)	(800) 424 - 8802	Environmental
Indiana Department of Environmental Management	(888) 233 - 7745	Environmental
U.S. Environmental Protection Agency - Region V (US EPA)	(312) 353 - 2318	Environmental
U.S. Coast Guard (USCG)	(219) 879 - 8371 [Michigan City, IN Station] (773) 768 – 4093	Environmental

Page 2 of 3 Rev Date: 04 October 2018

### **Local and Community Emergency Notifications**

AGENCY / EMERGENCY PERSONNEL	PHONE NUMBER	AUTHORIZED TO CALL
Local Emergency Planning Committee (LEPC) Porter Sheriff – after 4 pm	(219) 465 – 3593 8am–4pm (219) 477 – 3170	Environmental
Portage Fire Department	(219) 762 - 7404	Security
City of Portage, Sanitary Sewer Dept, Treatment Plant	(219) 762 - 1301 (219) 406 - 1205 (mobile, treatment plant mgr)	Environmental

### **Emergency Response Contractors**

Contractor	TELEPHONE	RESPONSE	CONTRACT	
	Number	TIME	RESPONSIBILITY	
Heritage Remediation Engineering, Inc.				
24-hr (toll-free)	(800) 487 - 7455	Within	Spill Bosponso	
24-hr	(219) 885 - 8014	2 hours	Spill Response and Remediation	
Office	(630) 739 - 1151	2 110013	and Kemediation	
Fax	(630) 739 - 9491			
KM Plant Services				
Gary Office	(219) 882 - 0060	Within 2	Spill Response	
Highland, IN Office	(219) 933 - 1100	hours	and Remediation	

Page 3 of 3 Rev Date: 04 October 2018

## **APPENDIX D**

# Pesticide, Herbicide & Fertilizer Application

Herbicides, Pesticides and Fertilizers								
Locations								
Product Name	Type of Product	East Side SWMU	Greenbelt II Landfill					
Pathfinder II	Herbicide	Х	Х					

Note: Hand held applications are done for grounds maintenance throughout the plant using "Round Up"-type herbicides.

Rev Date: 01/31/2014

# **APPENDIX E**

# **Inspection Checklists**

### USS MIDWEST PLANT - STORM WATER IMPACT LOCATIONS - INSPECTION CHECKLIST

[Checklist Revision Date: 09/27/2018]

Inspection Date: Inspector's Name:

		Column Reference/ Manhole Free of Signs of Types of Controls or		trols or				
		Location	Debris and	leaks/spills/	Practices in	Place:		
Area & Outfall#	ID	(surface type)	Leaves?	releases?	Туре	OK?	Notes	
Employee Parking Lot					Spill Kit @ B2A	Yes / No		
002	B2A	A1E (gravel)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	BZA	A15 (gravel)	res / No	163 / 110	Barriers	Yes / No		
1					Spill Kit @ B3	Yes / No		
	B2G	A27 (gravel)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	В3	B33 (gravel)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	БЭ	B55 (graver)	Yes / No	Yes / No	Barriers	Yes / No		
[					Spill Kit @ B2D	Yes / No		
	B2B	A35 (gravel)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	B2C	A39 (gravel)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	B2D	Bab	A43 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
		A43 (aspilait)	1637 110	1637 110	Barriers	Yes / No		
	B2E A48 (aspha	AAR (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
		A40 (aspilait)	163 / 110	163 / 110	Barriers	Yes / No		
	B2F	A53 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
		A33 (aspilait)			Barriers	Yes / No		
	В4	B41 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	D4	b41 (aspilait)	163 / 110	163 / 110	Barriers	Yes / No		
Employee Parking Lot					Spill Kit @ C5A	Yes / No		
003	C5A	A63 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	C5B	A68 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	C5C	A75 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	C5D	A81 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
AE1 Parking Lot					Spill Kit @ PD3	Yes / No		
002	PD1	P1 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
[	PD2	P2 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	PD3	P4 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
	PD4	P5 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		
TMP					Spill Kit	Yes / No		
004	D10	C123 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No		

### USS MIDWEST PLANT - STORM WATER IMPACT LOCATIONS - INSPECTION CHECKLIST

[Checklist Revision Date: 09/27/2018]

Inspection Date: Inspector's Name:

		Column Reference/	Manhole Free of	Signs of	Types of Cont	trols or	
		Location	Debris and	leaks/spills/	Practices in	Place:	
Area & Outfall#	ID	(surface type)	Leaves?	releases?	Туре	OK?	Notes
Warehouse 53A					Spill Kit @ SW-CB	Yes / No	
002	SW-CB	E5 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
	S-CB	E-F5 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
	3-CD	L-i 5 (aspirait)	163 / 110	res / NO	Barriers	Yes / No	
	SE-CB	F5 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
Main Gate 002	MG-1	C3 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
Portside Energy					Spill Kit @ CB4	Yes / No	
004	CB5	H148 (gravel)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
	CB7	K148 (gravel)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
	CB8	E148 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
	CB9	F148 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
Transportation Garage					Spill Kit	Yes / No	
	Fueling	Adjacent to Trans	NA	Yes / No	Barriers	Yes / No	
	Station	Garage					
Warehouse 51					Spill Kit	Yes / No	
003	C7	C83 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
					Barriers	Yes / No	
Security /					Spill Kit @ NE1	Yes / No	
Main Employee Gate	SW1	B57 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
003	NE1	B61 (gravel)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
	NE2	B63 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
					Spill Kit @ SE1	Yes / No	
	SE1	B57 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
	E1	B59 (asphalt)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
Final Treat					Spill Kit @ CB1	Yes / No	
004	CB1	A127 (gravel)	Yes / No	Yes / No	Warning Sign(s)	Yes / No	
	Lime Slurry	Final Treat (paved)	NA	Yes / No	Piping and Tanks	NA	
- 1101	Tanks	- "					
Roll Shop 003	Roll Shop	Roll Shop Rd	NA	Yes / No	Baghouse	NA	
Salt Shed	Baghouse Salt Storage	Adjacent to Landfill	NA	Yes / No	Roof Leaks?	Yes / No	
Sait Sileu	Jail Jiorage	Aujacent to Lanuill	INA	162 / MO	MOOI LEAKS!	162 / NO	

# **APPENDIX F**

## **ANNUAL STORM WATER REPORTS**

# **APPENDIX G**

### **SWPPP**

**Storm Water Discharge Summaries** 

2011 - 2016

(Previous Permit Term)

### USS Midwest Plant - Storm Water Discharge Summary 2011-2016 Appendix I - Storm Water Pollution Prevention Plan (SWPPP)

			001	001 002				003										
	ph	HEM O&G	Ammonia	TSS	COD	zinc	ph	HEM O&G	Ammonia	TSS	COD	zinc	ph	HEM O&G	Ammonia	TSS	COD	zinc
3/22/2012	7.8	0.52	0.62	3.0	150	0.38												
5/31/2012	7.5	<0.39	0.17	1.6	61	0.15	7.3	<0.39	0.18	2.6	34	0.076	7.6	<0.42	0.10	3.2	<5.5	0.0099
9/17/2012	7.4	0.71	0.084	2.6	167	0.42	7.4	0.47	0.22	2.6	37	0.064	7.7	0.51	0.17	4.2	7.1	0.012
10/17/2012	7.6	0.43	0.02	4.6	49	0.083	7.3	<.39	0.098	6.7	8.6	0.047	7.5	<.38	0.051	2.2	6.4	0.0093
3/15/2013	7.6	<.53	0.69	4.2	78	0.31	7.1	<.39	0.33	7.4	31	0.10	7.4	<.40	0.071	7.4	10	0.008
6/21/2013	7.8	<.41	0.27	1	60	0.12	6.8	<.4	0.077	4	14	0.02	7.6	<.41	0.036	1.2	9.8	0.0097
9/11/2013	8.4	2.1	0.41	20	150	0.13	7.9	1.3	0.34	21	73	0.10	8.1	1.3	0.08	2.8	20	0.027
12/20/2013	7.9	<.63	0.2	12	31	0.32	7.7	1.4	0.21	5.8	9.2	0.02	7.9	0.8	0.022	1.6	<8.0	0.0097
3/19/2014	7.7	1.3	0.17	11	29	0.27	6.8	1.7	0.2	48	44	0.17	7.3	1.2	0.11	5.6	17	0.032
4/21/2014	7.6	<.55	0.38	9.4	7.5	0.08	7.4	1	0.028	1.8	15	0.01	7.7	<.57	0.013	2	13	0.0047
8/19/2014	7.6	0.62	0.096	17	44	0.31	7.4	0.85	0.06	5.4	47	0.04	7.8	<.59	0.025	4	20	0.013
12/22/2014	7.7	1.4	2.8	0.099	26	0.28	7.6	<.39	0.24	6.6	10	0.02	7.9	<0.58	0.22	13	6.5	0.0052
3/25/2015	Outf	all 001 Close	d/Removed				7.6	1.2	0.038	7.2	3.7	0.062	7.2	<0.91	0.023	4.2	6.2	0.019
6/7/2015	Outf	all 001 Close	d/Removed				7.8	<.39	0.3	5.1	34	0.06	8	<1.2	0.098	2.7	5.5	0.021
9/18/2015	Outf	all 001 Close	d/Removed				6.9	<.39	.0.39	1	7.7	0.01	7.3	<1.2	0.017	1.1	11	0.0046
11/17/2015	Outf	all 001 Close	d/Removed				7.5	<.39	0.096	8	19	0.02	7.8	<1.2	0.065	5.9	15	0.019
3/24/2016	Outf	all 001 Close	d/Removed				7.8	2.7	0.31	23	32	0.089	7.3	1.4	0.05	4.4	13	0.026
6/15/2016	Outf	all 001 Close	d/Removed				NA	NA	0.159	1.43	21.00	0.042	NA	NA	0.106	8.86	9.1	0.015
9/26/2016	Outf	all 001 Close	d/Removed				NA	NA	0.036	0.071	1.7	0.02	NA	NA	0.043	9.8	4.8	0.015
11/2/2016	Outf	all 001 Close	d/Removed				NA	NA	0.083	15	10	0.05	NA	NA	0.059	7.1	12	0.08

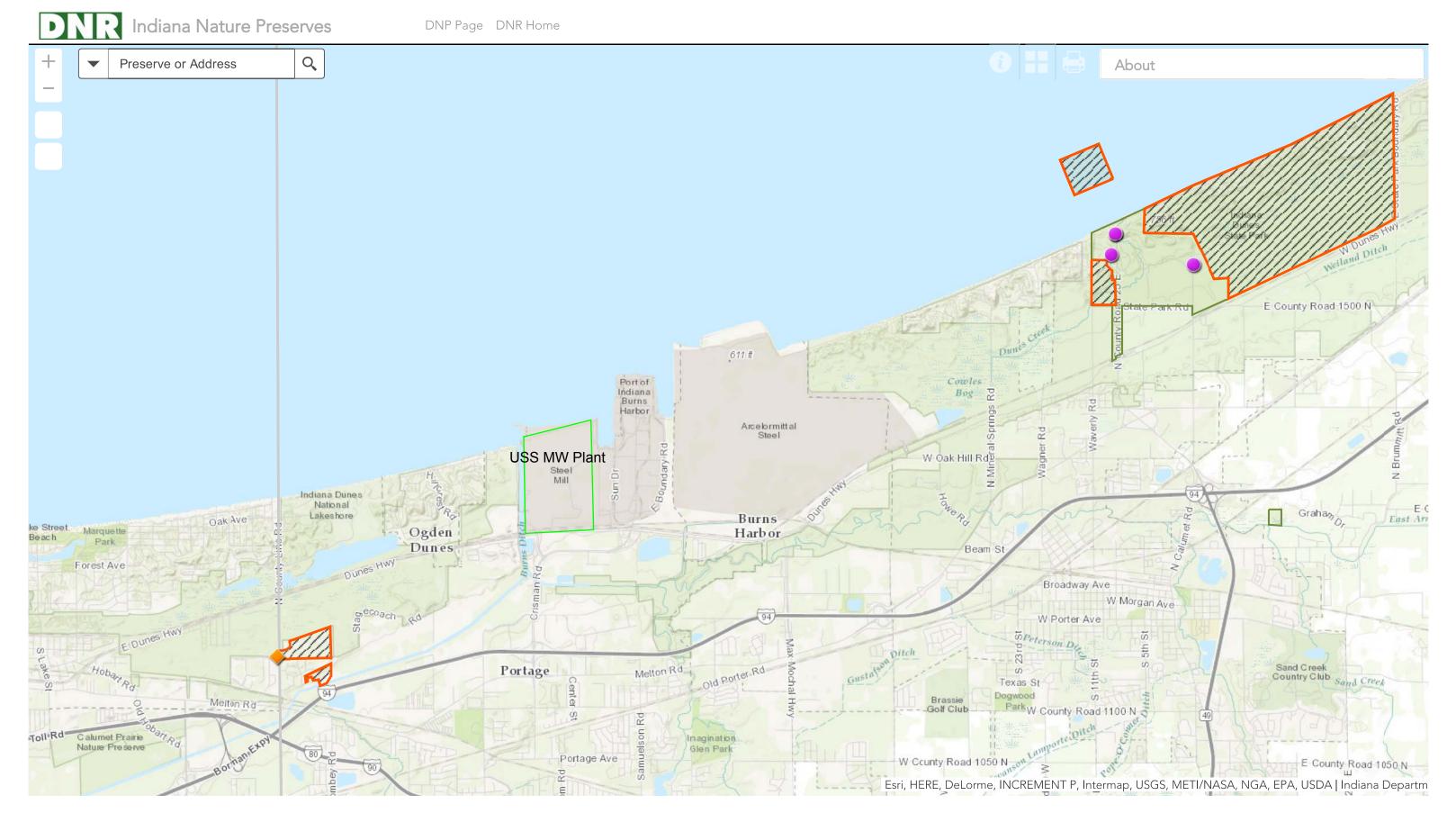
ALL UNITS MG/L except pH

Revision Date: 31 March 2017 Page 1 of 1

# **APPENDIX H**

# **Environmentally Sensitive Areas Porter County Survey**

9/2/2016 Indiana Nature Preserves



Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)	CI.	I.F.	QE.	C2	C1
Plethobasus cyphyus	Sheepnose	LE	SE	G3	S1 S2
Venustaconcha ellipsiformis	Ellipse		SSC	G4	82
nsect: Coleoptera (Beetles) Nicrophorus americanus	American Burying Beetle	LE	SX	G2G3	SX
nsect: Diptera //ydas tibialis	Golden Legged Mydas Fly		ST	GNR	S1S2
nsect: Homoptera Bruchomorpha dorsata			SR	GNR	S2
Bruchomorpha oculata			SR	GNR	SNR
Chlorotettix fallax	A Leafhopper		SR	GNR	S2
Cosmotettix bilineatus	Two-lined cosmotettix		ST	GNR	S1S2
lexamia pyrops	The Long-nose Three-awn Leafhopper		SR	GNR	S1S3
lexamia reflexus	Indiangrass Flexamia		ST	GNR	S2S3
Graminella mohri	113.01.9.000 1 10.01110		SR	GNR	SNR
lesamia nigridorsum	A Leafhopper		SR	GNR	S2S3
lesamia stramineus	Helianthus Leafhopper		SE	GNR	S1
hilaenarcys killa	Great Lakes dune spittlebug		SR	GNR	S2S3
olyamia caperata	Little Bluestem Polyamia		SR	GNR	SNR
olyamia herbida	The Prairie Panic Grass Leafhopper		ST	GNR	S1S3
olyamia obtectus	Sand Panic Grass Leafhopper		SR	GNR	S2S3
rairiana kansana	The Kansas Prairie Leafhopper		SE	GNR	S1S2
rosapia ignipectus	Red-legged Spittle Bug		SR	G4	S2
nsect: Lepidoptera (Butterfly)	H DI GI		CD	6465	9292
chalarus lyciades	Hoary Edge Skipper		SR	G4G5 G4	S2S3
mblyscirtes vialis	Common Roadside-skipper		SR		S3
trytonopsis hianna	Dusted Skipper		ST	G4G5	S1S2
Boloria selene myrina Boloria selene nebraskensis	Silver-bordered Fritillary		ST	G5T5 G5T3T4	S2 S1
	The Nebraska Silver Bordered Fritillary		SE		
Callophrys irus	Frosted Elfin		SE	G3	S1
callophrys polios	Hoary Elfin		SE	G5	S1
rynnis martialis	Mottled Duskywing		ST	G3	S2S3
rynnis persius persius	Persius Dusky Wing		SE	G5T1T3	S1S2
uchloe olympia	Olympia Marble		ST	G4G5	S2
uphydryas phaeton	Baltimore		SR	G4	S2
uphyes bimacula	Two-spotted Skipper		ST	G4	S2
Euphyes dion	Sedge Skipper		SR	G4	S2S3
lesperia leonardus	Leonard's Skipper		SR	G4	S2

Indiana Natural Heritage Data Center Division of Nature Preserves Indiana Department of Natural Resources This data is not the result of comprehensive county surveys.

State:

LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Species Name	Common Name	FED	STATE	GRANK	SRANK
Lycaeides melissa samuelis	Karner Blue	LE	SE	G5T2	S1
Lycaena helloides	Purplish Copper		SR	G5	S2S4
Poanes viator viator	Big Broad-winged Skipper		ST	G5T4	S2
Polygonia progne	Gray Comma		SR	G4G5	S2
Problema byssus	Bunchgrass Skipper		ST	G3G4	S2
Satyrodes eurydice fumosa	Smoky-eyed Brown		ST	G5T3T4	S1S2
Speyeria aphrodite	Aphrodite Fritillary		WL	G5	S3
Thorybes pylades	Northern Cloudywing		SR	G5	S2S3
Insect: Lepidoptera (Moth)			GE.	G3G4	S1
Agretic etigmosa			SE	G3G4 G4	S1 S1S2
Agrotic votunto	A 2.6 d		ST		S1S2 S2
Agrotis vetusta	A Moth		SR	G5 CND	S2S3
Anapia capsularia			SR	GNR	
Anepia capsularis	The Starry Campion Capsule Moth		SR	G5	S1S2
Apamea burgessi	A Noctuid Moth		ST	G4	S1
Apamea indocilis	The spastic apamea			GNR	S1S3
Apamea lutosa	Opalescent Apamea		SE	GNR	S1
Apamea nigrior	Black-dashed Apamea		SR	G5	S2S3
Apamea relicina	A Noctuid Moth		ST	G4	S1S2
Capis curvata	A Noctuid Moth		ST	G4	S2S3
Catocala gracilis	Graceful Underwing		SR	G5	S2S3
Catocala praeclara	Praeclara Underwing		SR	G5	S2S3
Chortodes enervata	The Many-lined Cordgrass Moth		ST	G4	S1
Chrysanympha formosa	The Huckleberry Looper Moth		SR	G5	S1S3
Coenochroa bipunctella	Sand Dune Panic Grass Moth		SR	GNR	S2S3
Coenochroa illibella	<b>Dune Panic Grass Moth</b>		SR	GNR	S2S3
Crambus bidens			SR	GNR	SNR
Crambus girardellus	Orange-striped Sedge Moth		SR	GNR	S2S3
Croesia curvalana			SR	GNR	SNR
Croesia semipurpurana			SR	GNR	SNR
Cyclophora pendulinaria	Sweetfern Geometer		SR	G5	SNR
Cycnia inopinatus	The Unexpected Milkweed Moth		SR	G4	S2S3
Epipaschia zelleri			SR	GNR	SNR
Eubaphe meridiana	AMoth		SR	G4	S2
Eucoptocnemis fimbriaris	A Noctuid Moth		ST	G4	S1
Euxoa albipennis	White-striped Dart		SR	G4G5	S1S3
Euxoa aurulenta	Dune Cutworm		ST	G5	S2
Fagitana littera	The Marsh Fern Moth		ST	G4	S1S2
Faronta rubripennis	The Pine Streak		ST	G3G4	S1

Indiana Natural Heritage Data Center Division of Nature Preserves

Indiana Department of Natural Resources

This data is not the result of comprehensive county surveys.

Fed:

State:

LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Species Name	Common Name	FED	STATE	GRANK	SRANK
Grammia anna	Anna's tiger moth		SR	G5	S2S3
Grammia figurata	The Figured Grammia		SR	G5	S2S3
Grammia phyllira	The Sand Barrens Grammia		SR	G4	S2S3
Grammia virguncula			SR	G5	S1S2
Hadena ectypa	The Starry Campion Moth		ST	G3G4	S1S3
Hemaris gracilis	The Blueberry Clearwing Sphinx		SR	G3G4	S1S2
Holomelina opella	The Smokey Holomelina		SR	G5	S2S3
_esmone detrahens	A Moth		SR	G5	S2
∟eucania inermis	A Moth		SR	G4	S2S3
∟eucania linita	Salt Marsh Wainscot		SR	GNR	S2
oxagrotis acclivis	A Noctuid Moth		ST	G4G5	S2
Macrochilo absorptalis	A Moth		SR	G4G5	S2S3
Aacrochilo hypocritalis	A Noctuid Moth		SR	G4	S2
Macrochilo louisiana			ST	G4	S1S2
Melanomma auricinctaria	Huckleberry Eye-spot Moth		SR	G4	S2S3
Meropleon ambifuscum	Newman's Brocade		ST	G3G4	S1S2
Meropleon diversicolor	A Noctuid Moth		SR	G4	S2S3
⁄lesapamea stipata	The Four-lined Cordgrass Borer		SE	G4	S1
Metanema determinata	Dark Metanema		SR	GNR	SNR
Metanema inatomaria	Pale Metanema		SR	GNR	SNR
lephopterix dammersi	Leadplant Leafwebber Moth		SE	GNR	S1
Nola cilicoides			SR	G4	SNR
Nola pustulata	Sharp-blotched Nola		SR	G4	SNR
Odontosia elegans	Elegant Prominent		SR	G5	S1S2
Oligia obtusa	A Noctuid Moth		SE	G4	S1
Paectes abrostolella	The Barrens Paectes Moth		SR	G4	S2S3
Papaipema cerina	Golden Borer Moth		ST	G2G4	S1
Papaipema leucostigma	Columbine Borer		ST	G4	S1S2
Papaipema lysimachiae	The St. John'Swort Borer Moth		SR	G4G5	S1S3
Papaipema maritima	The Giant Sunflower Borer Moth		ST	G3	S2
Papaipema silphii	Silphium Borer Moth		ST	G3G4	S2
Papaipema speciosissima	The Royal Fern Borer Moth		ST	G4	S2S3
Parasa indetermina	A Moth		SR	G4	S1S2
Peoria gemmatella	Gemmed Cordgrass Borer		SR	GNR	S1
Peoria tetradella			SR	GNR	SNR
Phaneta ochroterminana			SR	GNR	SNR
Phaneta ornatula			SR	GNR	SNR
Phaneta striatana			SR	GNR	SNR
Platyperigea meralis	The Rare Sand Quaker		ST	G4	S2
Platyperigea multifera	Dune rustic		~ *	GNR	S1S2

Indiana Natural Heritage Data Center Division of Nature Preserves

Indiana Department of Natural Resources

This data is not the result of comprehensive county surveys.

State:

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Species Name	Common Name	FED	STATE	GRANK	SRANK
Protorthodes incincta	Saturn quaker		SR	GNR	S2
⊃ygarctia spraguei	Sprague's Pygartic		SR	G5	S1S2
Pyla arenaeola	A Pyralid Moth		SE	GNR	S1
⊃yrausta laticlavia	The Southern Purple Mint Moth		SR	GNR	S1S2
Schinia indiana	Phlox Moth		SE	G2G4	S1
Schinia septentrionalis	A Noctuid Moth		SR	G3G4	S2S3
Scirpophaga perstrialis			SR	GNR	SNR
Semiothisa eremiata	The Goat's Rue Looper		SR	G4	S2S3
Sitochroa dasconalis	Pearly Indigo Borer		ST	GNR	S1S2
Spartiniphaga inops	Spartina Borer Moth		SR	G3G4	S2S3
Sphinx luscitiosa	The Luscious Willow Sphinx		SR	G4	S1S2
Tampa dimediatella	Red-striped Panic Grass Moth		ST	GNR	S2S3
Fricholita notata	Marked Noctuid		ST	G5	S1S2
Trichosilia manifesta	The Record Keeper Moth		SR	G4	S3S4
Zomaria interruptolineana	•		SR	GNR	SNR
nsect: Odonata (Dragonflies) Sympetrum semicinctum	Band-winged Meadowhawk		SR	G5	S2S3
Insect: Orthoptera Chloealtis conspersa	Sprinkled Locust		SR	G5	S2S3
Conocephalus saltans	Prairie Meadow Katydid		SR	GNR	S1S2
Hesperotettix viridis pratensis	A Grasshopper		SR	G5T5	S1S2
Melanoplus viridipes viridipes	Green-legged Spur-throated		SR	G4	S2
Molariopido virialpos virialpos	Grasshopper		SIC	01	52
Neoconocephalus exiliscanorus	Slightly Musical Conehead		SR	GNR	SNR
Neoconocephalus nebrascensis	Nebraska Conehead		SR	GNR	S1S2
Orphulella pelidna	Green Desert Grasshopper		SR	G5	S1S2
Pseudopomala brachyptera	Bunch Grass Locust		ST	G5	S1S2
Psinidia fenestralis	Sand Locust		SR	G5	S1S2
Frimerotropis maritima	The Dune Locust		ST	G5	S2
F <b>ish</b> Acipenser fulvescens	Lake Sturgeon		SE	G3G4	<b>S</b> 1
Amphibian					
Ambystoma laterale	Blue-spotted Salamander		SSC	G5	S2
lemidactylium scutatum	Four-toed Salamander		SSC	G5	S2
ithobates pipiens	Northern Leopard Frog		SSC	G5	S2
Necturus maculosus	Common mudpuppy		SSC	G5	S2
Reptile Clemmys guttata	Spotted Turtle		SE	G5	S2
Clonophis kirtlandii	Kirtland's Snake		SE	G2	S2
Emydoidea blandingii	Blanding's Turtle		SE	G4	S2

Indiana Natural Heritage Data Center Division of Nature Preserves Indiana Department of Natural Resources This data is not the result of comprehensive county surveys.

State:

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Species Name	Common Name	FED	STATE	GRANK	SRANK
Opheodrys vernalis	Smooth Green Snake		SE	G5	S2
Sistrurus catenatus catenatus	Eastern Massasauga	C	SE	G3G4T3Q	S2
Thamnophis butleri	Butler's Garter Snake		SE	G4	S1
Thamnophis proximus proximus	Western Ribbon Snake		SSC	G5T5	S3
Bird					
Ammodramus henslowii	Henslow's Sparrow		SE	G4	S3B
Ardea alba	Great Egret		SSC	G5	S1B
Asio otus	Long-eared Owl			G5	S2
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B
Botaurus lentiginosus	American Bittern		SE	G4	S2B
Buteo lineatus	Red-shouldered Hawk		SSC	G5	S3
Buteo platypterus	Broad-winged Hawk		SSC	G5	S3B
Circus cyaneus	Northern Harrier		SE	G5	S2
Cistothorus palustris	Marsh Wren		SE	G5	S3B
Cistothorus platensis	Sedge Wren		SE	G5	S3B
Dendroica cerulea	Cerulean Warbler		SE	G4	S3B
Dendroica virens	Black-throated Green Warbler			G5	S2B
Empidonax alnorum	Alder Flycatcher			G5	S2B
-alco peregrinus	Peregrine Falcon		SSC	G4	S2B
xobrychus exilis	Least Bittern		SE	G5	S3B
Lanius Iudovicianus	Loggerhead Shrike		SE	G4	S3B
Mniotilta varia	Black-and-white Warbler		SSC	G5	S1S2B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Rallus elegans	King Rail		SE	G4	S1B
Rallus limicola	Virginia Rail		SE	G5	S3B
Sturnella neglecta	Western Meadowlark		SSC	G5	S2B
Vermivora chrysoptera	Golden-winged Warbler		SE	G4	S1B
Wilsonia canadensis	Canada Warbler		~-	G5	S2B
Wilsonia citrina	Hooded Warbler		SSC	G5	S3B
Mammal					
Lasiurus borealis	Eastern Red Bat		SSC	G5	S4
Lasiurus cinereus	Hoary Bat		SSC	G5	S4
Mustela nivalis	Least Weasel		SSC	G5	S2?
Myotis lucifugus	Little Brown Bat		SSC	G3	S2
Myotis septentrionalis	Northern Myotis		SSC	G1G3	S2S3
Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	G2	S1
Perimyotis subflavus	Eastern Pipistrelle		SSC	G3	S2S3
Reithrodontomys megalotis	Western Harvest Mouse			G5	S2
Spermophilus franklinii	Franklin's Ground Squirrel		SE	G5	S2
Taxidea taxus	American Badger		SSC	G5	S2

Indiana Natural Heritage Data Center Division of Nature Preserves Indiana Department of Natural Resources This data is not the result of comprehensive county

surveys.

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting Fed: State:

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Species Name	Common Name	FED	STATE	GRANK	SRANK
Vascular Plant					
Actaea rubra	Red Baneberry		SR	G5	S2
Amelanchier humilis	Running Serviceberry		SE	G5	S1
Arabis glabra	Tower-mustard		WL	G5	S2
Aralia hispida	Bristly Sarsaparilla		SE	G5	S1
Arctostaphylos uva-ursi	Bearberry		SR	G5	S2
Arenaria stricta	Michaux's Stitchwort		SR	G5	S2
Aristida intermedia	Slim-spike Three-awn Grass		SR	GNR	S2
Aristida tuberculosa	Seabeach Needlegrass		SR	G5	S2
Aster borealis	Rushlike Aster		SR	G5	S2
Aster furcatus	Forked Aster		SR	G3	S2
Aster sericeus	Western Silvery Aster		SR	G5	S2
Betula populifolia	Gray Birch		SE	G5	S1
Bidens beckii	Beck Water-marigold		ST	G4G5	S1
Botrychium matricariifolium	Chamomile Grape-fern		SR	G5	S2
Botrychium multifidum var. intermedium	Leathery Grape-fern		SX	G5T4?	SX
Botrychium oneidense	Blunt-lobe Grape-fern		WL	G4	S3
Brachyelytrum aristosum	Northern shorthusk		SE	G4G5	S1
Buchnera americana	Bluehearts		SE	G5?	S1
Carex alata	Broadwing Sedge		WL	G5	S3
Carex atherodes	Awned Sedge		SE	G5	S1
Carex atlantica ssp. capillacea	Howe Sedge		SE	G5T5?	S1
Carex aurea	Golden-fruited Sedge		SR	G5	S2
Carex brunnescens	Brownish Sedge		SE	G5	S1
Carex conoidea	Prairie Gray Sedge		ST	G5	S1
Carex debilis var. rudgei	White-edge Sedge		SR	G5T5	S2
Carex eburnea	Ebony Sedge		SR	G5	S2
Carex flava	Yellow Sedge		ST	G5	S2
Carex folliculata	Long Sedge		SR	G4G5	S2
Carex garberi	Elk Sedge		ST	G5	S2
Carex leptonervia	Finely-nerved Sedge		SE	G4	S1
Carex limosa	Mud Sedge		SE	G5	S1
Carex pedunculata	<u> </u>		SR	G5	S2
Carex seorsa	Longstalk Sedge Weak Stellate Sedge		SR	G3 G4	S2
Chimaphila umbellata ssp. cisatlantica	Pipsissewa		ST	G5T5	S2 S2
Chrysosplenium americanum	American Golden-saxifrage		ST	G513	S2 S2
Circaea alpina	Small Enchanter's Nightshade		SX	G5	SX
Cirsium hillii			SE SE	G3	SI
Cirsium pitcheri	Hill's Thistle	IТ		G3	S2
Clintonia borealis	Dune Thistle	LT	ST	G5	S2 S1
Chintonia Dorgans	Clinton Lily		SE	G)	31

Indiana Natural Heritage Data Center Division of Nature Preserves

Indiana Department of Natural Resources

This data is not the result of comprehensive county surveys.

State:

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

Species Name	Common Name	FED	STATE	GRANK	SRANK
Coeloglossum viride var. virescens	Long-bract Green Orchis		ST	G5T5	S2
Cornus amomum ssp. amomum	Silky Dogwood		SE	G5T5	S1
Cornus canadensis	Bunchberry		SE	G5	S1
Cornus rugosa	Roundleaf Dogwood		SR	G5	S2
Cyperus houghtonii	Houghton's Nutsedge		SE	G4?	S2
Cypripedium calceolus var. parviflorum	Small Yellow Lady's-slipper		SR	G5	S2
Cypripedium candidum	Small White Lady's-slipper		WL	G4	S2
Dichanthelium sabulorum var. thinium	Hemlock Panic-grass		SR	G5T5	S2
Diervilla Ionicera	Northern Bush-honeysuckle		SR	G5	S2
Drosera intermedia	Spoon-leaved Sundew		SR	G5	S2
Dryopteris clintoniana	Clinton Woodfern		SE	G5	S1
Eleocharis geniculata	Capitate Spike-rush		ST	G5	S2
Eleocharis melanocarpa	Black-fruited Spike-rush		ST	G4	S2
Eleocharis microcarpa	Small-fruited Spike-rush		SE	G5	S1
Eleocharis robbinsii	Robbins Spikerush		SR	G4G5	S2
Epigaea repens	Trailing Arbutus		WL	G5	S3
Eriocaulon aquaticum	Pipewort		SE	G5	S1
Eriophorum angustifolium	Narrow-leaved Cotton-grass		SR	G5	S2
Euphorbia polygonifolia	Seaside Spurge		SR	G5?	S3
Fimbristylis puberula	Carolina Fimbry		SE	G5	S1
Fuirena pumila	Dwarf Umbrella-sedge		ST	G4	S2
Gentiana alba	Yellow Gentian		SR	G4	S2
Gentiana puberulenta	Downy Gentian		ST	G4G5	S2
Geranium bicknellii	Bicknell Northern Crane's-bill		SE	G5	S1
Glyceria grandis	American Manna-grass		SE	G5	S1
Hemicarpha drummondii	Drummond Hemicarpha		SE	G4G5	S1
Hudsonia tomentosa	Sand-heather		ST	G5	S2
Hypericum adpressum	Creeping St. John's-wort		SE	G3	S1
Hypericum pyramidatum	Great St. John's-wort		ST	G4	S1
Juglans cinerea	Butternut		WL	G4	S3
Juncus articulatus	Jointed Rush		SE	G5	S1
Juncus balticus var. littoralis	Baltic Rush		SR	G5T5	S2
Juncus militaris	Bayonet Rush		SE	G4	S1
Juncus pelocarpus	Brown-fruited Rush		SE	G5	S2
Juncus scirpoides	Scirpus-like Rush		ST	G5	S2
Juniperus communis	Ground Juniper		SR	G5	S2
Lathyrus maritimus var. glaber	Beach Peavine		SE	G5T4T5	S1
Lathyrus ochroleucus	Pale Vetchling Peavine		SE	G5	S1
Lathyrus venosus	Smooth Veiny Pea		ST	G5	S2
Lechea stricta	Upright Pinweed		SX	G4?	SX

Indiana Natural Heritage Data Center Division of Nature Preserves

Indiana Department of Natural Resources

This data is not the result of comprehensive county surveys.

State:

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

Species Name	Common Name	FED	STATE	GRANK	SRANK
Lemna minima	Least Duckweed		SE	GNR	S1
Lemna valdiviana	Pale Duckweed		SE	G5	S1
Linnaea borealis	Twinflower		SX	G5	SX
Linum striatum	Ridged Yellow Flax		WL	G5	S3
Ludwigia sphaerocarpa	Globe-fruited False-loosestrife		SE	G5	S1
Lycopodiella inundata	Northern Bog Clubmoss		SE	G5	S1
Lycopodiella subappressa	Northern Appressed Bog Clubmoss		SE	G2	S1
Lycopodium hickeyi	Hickey's Clubmoss		SR	G5	S2
Lycopodium lucidulum	Shining Clubmoss		WL	G5	S3
Lycopodium obscurum	Tree Clubmoss		SR	G5	S2
Lycopodium tristachyum	Deep-root Clubmoss		SR	G5	S2
Melampyrum lineare	American Cow-wheat		SR	G5	S2
Mikania scandens	Climbing Hempweed		SE	G5	S1
Milium effusum	Tall Millet-grass		SR	G5	S2
Myosotis laxa	Smaller Forget-me-not		ST	G5	S1
Myriophyllum pinnatum	Cutleaf Water-milfoil		SE	G5	S1
Myriophyllum verticillatum	Whorled Water-milfoil		SR	G5	S2
Najas gracillima	Thread-like Naiad		ST	G5?	S1
Orobanche fasciculata	Clustered Broomrape		SE	G4	S1
Oryzopsis asperifolia	White-grained Mountain-ricegrass		SE	G5	S1
Oryzopsis pungens	Slender Mountain-ricegrass		SX	G5	SX
Oryzopsis racemosa	Black-fruit Mountain-ricegrass		SR	G5	S2
Panax quinquefolius	American Ginseng		WL	G3G4	S3
Panax trifolius	Dwarf Ginseng		WL	G5	S2
Panicum boreale	Northern Witchgrass		SR	G5	S2
Panicum leibergii	Leiberg's Witchgrass		ST	G5	S2
Panicum mattamuskeetense	A Panic-grass		SX	G4?	SX
Panicum verrucosum	Warty Panic-grass		ST	G4	S2
Pinus banksiana	Jack Pine		SR	G5	S2
Pinus strobus	Eastern White Pine		SR	G5	S2
Plantago cordata	Heart-leaved Plantain		SE	G4	S1
Platanthera ciliaris	Yellow-fringe Orchis		SE	G5	S1
Platanthera clavellata	Small Green Woodland Orchis		WL	G5	S3
Platanthera hookeri	Hooker Orchis		SX	G4	SX
Platanthera hyperborea	Leafy Northern Green Orchis		ST	G5	S2
Platanthera psycodes	Small Purple-fringe Orchis		SR	G5	S2
Poa alsodes	Grove Meadow Grass		SR	G4G5	S2
Poa paludigena	Bog Bluegrass		WL	G3	S3
Polygala paucifolia	Gay-wing Milkwort		SE	G5	S1

Indiana Natural Heritage Data Center

Division of Nature Preserves

Indiana Department of Natural Resources

This data is not the result of comprehensive county surveys.

State:

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

Species Name	Common Name	FED	STATE	GRANK	SRANK
Polygonella articulata	Eastern Jointweed		SR	G5	S2
Polygonum careyi	Carey's Smartweed		ST	G4	S2
Polygonum hydropiperoides var. opelousanum	Northeastern Smartweed		ST	G5TNRQ	S2
Populus balsamifera	Balsam Poplar		SE	G5	S1
Potamogeton epihydrus	Nuttall Pondweed		SE	G5	S1
Potamogeton pulcher	Spotted Pondweed		SE	G5	S1
Potamogeton pusillus	Slender Pondweed		WL	G5	S2
Potamogeton richardsonii	Redheadgrass		SR	G5	S2
Potamogeton strictifolius	Straight-leaf Pondweed		ST	G5	S1
Potamogeton vaseyi	Vasey's Pondweed		SE	G4	S1
Potentilla anserina	Silverweed		ST	G5	S2
Prunus pensylvanica	Fire Cherry		SR	G5	S2
Pyrola rotundifolia var. americana	American Wintergreen		SR	G5	S2
Pyrola secunda	One-sided Wintergreen		SX	G5	SX
Rhexia mariana var. mariana	Maryland Meadow Beauty		ST	G5T5	S1
Rhus aromatica var. arenaria	Beach Sumac		SR	G5T3Q	S2
Rhynchospora fusca	Brown beakrush		SX	G4G5	SX
Rhynchospora macrostachya	Tall Beaked-rush		SR	G4	S2
Rhynchospora nitens	Short-beaked Bald-rush		SE	G4?	S1
Rhynchospora recognita	Globe Beaked-rush		SE	G5?	S1
Rhynchospora scirpoides	Long-beaked Baldrush		ST	G4	S2
Rubus alumnus	A Bramble		SX	G5	SX
Salix cordata	Heartleaf Willow		ST	G4	S2
Schoenoplectus hallii	Hall's Bulrush		SE	G2G3	S1
Schoenoplectus smithii	Smith's Bulrush		SE	G5?	S1
Schoenoplectus torreyi	Torrey's Bulrush		SE	G5?	S1
Scirpus expansus	Bulrush		SE	G4	S1
Scirpus purshianus	Weakstalk Bulrush		SR	G4G5	S1
Scirpus subterminalis	Water Bulrush		SR	G4G5	S2
Scleria reticularis	Reticulated Nutrush		ST	G4	S2
Selaginella rupestris	Ledge Spike-moss		ST	G5	S2
Sisyrinchium montanum	Strict Blue-eyed-grass		SE	G5	S1
Solidago ptarmicoides	Prairie Goldenrod		SR	G5	S2
Solidago simplex var. gillmanii	Sticky Goldenrod		ST	G5T3?	S2
Sorbus decora	Northern Mountain-ash		SX	G4G5	SX
Sparganium androcladum	Branching Bur-reed		ST	G4G5	S2
Spiranthes lucida	Shining Ladies'-tresses		SR	G5	S2
Spiranthes magnicamporum	Great Plains Ladies'-tresses		SE	G4	S1
Stipa avenacea	Blackseed Needlegrass		SR	G5	S2
Styrax americanus	American Snowbell		WL	G5	S3

Indiana Natural Heritage Data Center Division of Nature Preserves

Indiana Department of Natural Resources

This data is not the result of comprehensive county surveys.

State:

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

Species Name	Common Name	FED	STATE	GRANK	SRANK
Talinum rugospermum	Prairie Fame-flower		ST	G3G4	S2
Thalictrum pubescens	Tall Meadowrue		ST	G5	S2
Thuja occidentalis	Northern White Cedar		SE	G5	S1
Trichostema dichotomum	Forked Bluecurl		SR	G5	S2
Trillium cernuum var. macranthum	Nodding Trillium		SE	G5T4	S1
Utricularia cornuta	Horned Bladderwort		ST	G5	S2
Utricularia minor	Lesser Bladderwort		ST	G5	S1
Utricularia purpurea	Purple Bladderwort		SR	G5	S2
Utricularia subulata	Zigzag Bladderwort		ST	G5	S2
Vaccinium oxycoccos	Small Cranberry		ST	G5	S2
Valerianella chenopodiifolia	Goose-foot Corn-salad		SE	G5	S1
Viburnum opulus var. americanum	Highbush-cranberry		SE	G5T5	S1
Viola primulifolia	Primrose-leaf Violet		ST	G5	S2
Woodwardia areolata	Netted Chainfern		SR	G5	S2
Xyris difformis	Carolina Yellow-eyed Grass		ST	G5	S2
Zannichellia palustris	Horned Pondweed		SR	G5	S2
High Quality Natural Community					
Forest - upland dry	Dry Upland Forest		SG	G4	S4
Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	G4	S4
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3
∟ake - lake	Lake		SG	GNR	S2
_ake - pond	Pond		SG	GNR	SNR
Prairie - dry-mesic	Dry-mesic Prairie		SG	G3	S2
Prairie - mesic	Mesic Prairie		SG	G2	S2
Prairie - sand dry	Dry Sand Prairie		SG	G3	S2
Prairie - sand dry-mesic	Dry-mesic Sand Prairie		SG	G3	S3
Prairie - sand wet-mesic	Wet-mesic Sand Prairie		SG	G1?	S2
Prairie - wet	Wet Prairie		SG	G3	S1
Primary - dune lake	Foredune		SG	G3	S1
Rhynchospora capitellata - Rhexia virginica - Rhynchospora scirpoides - Schoenoplectus hallii Herbaceous Vegetation	Inland Coastal Plain Marsh			G2?	SNR
Savanna - sand dry	Dry Sand Savanna		SG	G2?	S2
Savanna - sand dry-mesic	Dry-mesic Sand Savanna		SG	G2?	S2S3
Wetland - fen	Fen		SG	G3	S3
Wetland - fen forested	Forested Fen		SG	G3	S1
Wetland - marsh	Marsh		SG	GU	S4
Wetland - meadow sedge	Sedge Meadow		SG	G3?	S1
Wetland - panne	Panne		SG	G2	S1
Wetland - swamp shrub	Shrub Swamp		SG	GU	S2

Indiana Natural Heritage Data Center

Division of Nature Preserves

Indiana Department of Natural Resources

This data is not the result of comprehensive county surveys.

Fed:

State:

LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

Page 11 of 1 02/11/2016

### Indiana County Endangered, Threatened and Rare Species List **County: Porter**

Species Name	Common Name	FED	STATE	GRANK	SRANK
Other Significant Element Critical habitat area - charadrius melodus	Piping Plover Critical Habitat Area			GNR	SNR

Indiana Natural Heritage Data Center Division of Nature Preserves

Indiana Department of Natural Resources

This data is not the result of comprehensive county surveys.

State:

LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting Fed:

SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant; WL = watch list

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant

globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank